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Deliverable D2.1: The Social Perspective

A report presenting a review of the key features raised by the social perspectives of surveillance and democracy

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IRISS WORK PACKAGE 2

TASK 2.1: THE SOCIAL PERSPECTIVE

Contents

EXECUTIVE SUMMARY: THE SOCIAL PERSPECTIVE

TASK DESCRIPTION

This task will review the key contributions to knowledge emerging from sociological (including criminological) perspectives of surveillance and democracy. Included within this perspective are approaches which consider changing societal values, such as security, trust and privacy, changing social behaviour, criminological approaches that address feelings of fear and insecurity, and how all these have changed over time in different democratic settings. This task will also consider the ways in which people and groups in society experience surveillance and how they can and have resisted surveillance over time.

OVERVIEW

The core purpose of this task was to identify the dominant literatures and themes evident in the sociological (including criminological) thinking about surveillance and democracy. Together with Tasks 2.2 and 2.3 we explored how democratic values and practices are evolving alongside surveillance technologies in different democratic contexts. Further dimensions which were considered included: how surveillance affects democratic and societal values, how data retention is perceived in different democratic contexts, how human relationships are affected by surveillance, how fears can be induced by political, economic and media activity, how fears may shape the deployment of specific technologies, how insecurity may undermine political debate and decision-making, and how societies develop resilience to terrorism and other threats. Task 2.1 will contribute to the distinctive ways of seeing and understanding promoted by the social perspective of surveillance in a democratic polity, identifying and highlighting different aspects of co-evolution of surveillance and democracy in different democratic societies. Along with Tasks 2.2 and 2.3 which looked at the political and legal perspectives, Task 2.1 contributed to the draft theoretical framework (Task 2.4), which was discussed at a Workshop (Task 2.5) involving IRISS partners, and external 'experts' and 'stakeholders' and took place at Edinburgh on 6 December, 2012. The integrated theoretical framework of analysis will be used to guide the empirical research to be conducted in WPs 3, 4 and 5.

Details of the main subject areas reviewed by the Task partners

The partners involved in examining the 'Social Perspective' have looked at many different societal aspects of surveillance, including the following:

Surveillance and democracy;
Surveillance and changing societal values, such as attitudes and experiences towards security, trust and privacy;
Surveillance and changing social behaviour;
Surveillance and equality: privacy concerns, social sorting, social exclusion and profiling;
Surveillance and (re)construction of personal identity;
Surveillance and criminological approaches that address feelings of fear and insecurity;
Different representations of security, including shaping perceptions, the media and popular culture (e.g. surveillance art and CCTV film–making);
Resisting and negotiating surveillance

Key themes and emergent findings

The underlying theme emerging from this perspective is that surveillance, mediated by new technology, is increasingly embedded in the fabric of society, and as such, shapes and is shaped by social relations and structures. A number of interlinked themes are evident:

Theme 1: The Normality of Surveillance

Surveillance has become a normal part of everyday life and it is entrenched in the social fabric of life. This is manifest in the way we perceive, use and react to surveillance technologies. Surveillance technologies therefore shape our socio-economic relations, our relationships with each other, relationships between the state and its citizens, our reality and our life chances;

Theme 2: Surveillance, Power and Control

Surveillance technologies influence and shape human behaviour and can therefore be seen as tools and practices for social control and social exclusion. Surveillance represents a disproportionate power relationship between the surveyor and the surveyed. The relationship is unequal and usually affords the surveyor more power. Surveillance technologies are embedded in and reinforce existing power relations in society, especially, but not exclusively, citizen-state relations;

Theme 3: Surveillance and Security

Surveillance has predominantly been understood as a technique (a set of tools and practices) to combat and deter criminal and other undesirable behaviour. Surveillance technologies are regularly deployed in security settings and the dominant discourse about their purpose and impacts relates to their security function, and their use in alleviating public fears and insecurities;

Theme 4: Surveillance and Social Values

The diffusion of surveillance technologies and associated practices is interlinked with evolving social values. The development of both is intertwined and they are evolving together. In particular, our attitudes towards trust, privacy and identity are evolving alongside the use of surveillance technologies, and

Theme 5: Surveillance and Transparency

Surveillance, mediated by new information and communication technologies, generates huge amounts of information about individuals, groups and trends in society. This information is valuable and is used to shape the production of goods and services. Surveillance technologies utilise vast quantities of personal information, they make individuals more ‘transparent’ with their digital personas becoming more important and influencing their social relations and life chances.

Conclusion

Task 2.1 has contributed to the distinctive ways of seeing and understanding promoted by the social perspective of surveillance, identifying and highlighting different aspects of the co-evolution of surveillance and democracy in different democratic societies and settings. From the key themes identified above, it can be seen that surveillance as mediated by new technology, has now become embedded in the fabric of society, and has become a ubiquitous medium, evident in most aspects of people’s everyday lives and their relationships. Along with Tasks 2.2 and 2.3, Task 2.1 has contributed to the draft theoretical framework, which

was discussed at the Workshop involving IRISS partners, external 'experts' and 'stakeholders', and took place at Edinburgh on 6 December 2012, the research questions from which will be used to guide the empirical research to be conducted in Work Packages 3, 4 and 5.

1. SURVEILLANCE AND DEMOCRACY: AN INTRODUCTION

Plato (427-347 BC), translated by Lee, refers to four types of ‘‘imperfect societies’’ of which democracy is one (the others being timarchy, oligarchy and tyranny),[1] and describes the salient characteristics of democracy as ‘‘equality of political opportunity and freedom for the individual to do as he likes’’,[2] but Plato goes on to describe the transition from a democratic society to a tyrannical one as ‘‘…..an excessive desire for liberty at the expense of everything else is what undermines democracy and leads to the demand for tyranny’’.[3] Plato also describes the existence of a Guardian class, and of the need to ensure that they are the right people to undertake the role of devoting their life to community service: ‘‘A close watch must be kept on them, then, at all ages, to see if they stick to this principle, and do not forget or jettison, under the influence of force or witchcraft, the conviction that they must always do what is best for the community.’’[4] So we can see therefore that the relationship between democracy and surveillance is not a modern phenomenon, and that ‘democracy’ itself is not in a fixed state of existence, but due to its participative nature, can be fluid, dynamic and capable of being changed, influenced and controlled. It is also arguably, imperfect, and is difficult to define, as Haggerty and Samatas describe: ‘‘The first difficulty that arises when thinking about surveillance and democracy is that both concepts are complex. If we start with democracy, we quickly recognise the truth of George Orwell’s (1946) observation that there are forces aligned against attempts to provide a meaningful definition.’’[5]

Surveillance in its purest form, is a natural, societal and indeed human response to the needs of and caring for others,[6] and although there are many forms and interpretations of surveillance, inevitably this involves a relationship between different parties, while often, the purpose of the surveillance is unknown to one or more of the parties and the surveillance can be unseen. Usually however, an unequal power relationship will exist between those undertaking the surveillance and those being surveilled.[7] Throughout the 20th century saw the growth of public administrations and the reliance on hierarchical bureaucratic structures by the state and public bodies, to record personal information about citizens and then using the data held for the delivery of services, such as passports, driving and vehicle licences, health services etc.[8] The accessibility of large data sets, and the existence of even more sophisticated bureaucratic structures in the public realm, has in turn given greater opportunities for the state to use surveillance technologies for other purposes, such as responding to terrorism threats (perceived or real). With the growing use of and with rapid development in new ICT’s, media outputs, telecommunications, social networking, and 24/7 news coverage, there has also been an incremental acceptance of the use of surveillance technologies in society and the reliance

[1] Lee, Desmond, *Plato: The Republic*, translated with an introduction by Desmond Lee, Penguin Books, London, 1987, p.295.
[2] Ibid, p.311.
[3] Ibid, p.321.
[4] Ibid, p.119.
[5] Haggerty, Kevin D., and Minas Samatas, (eds.), *Surveillance and Democracy*, Cavendish Publishing Limited, Milton Park, Abingdon, UK, 2010, p.1.
[6] Murakami Wood, David, Kirstie Ball, David Lyon, Clive Norris, and Charles D. Raab, *A Report on the Surveillance Society for the Information Commissioner by the Surveillance Studies Network*, 2006, p.2. The Full Report is available at*:*
http://www.ico.gov.uk/upload/documents/library/data_protection/practical_application/surveillance_society_full_report_2006.pdf
[7] Ibid.
[8] Webster, C. William R., “Public Administration as Surveillance”, in Ball, Kirstie, Kevin D. Haggerty and David Lyon, (eds.), Routledge Handbook of Surveillance Studies, London, 2012, pp. 313-320.

with which people use them in their everyday lives. Haggerty and Samatas[9] support this point: ''As citizens start to become attuned to the pervasiveness of surveillance, we suspect that they will recognise that most Western nations would now qualify as surveillance societies given the centrality of surveillance to myriad institutional practices.''

Of concern therefore to modern democratic societies is how to achieve equilibrium between accepting varying forms of surveillance which are perceived to be for the common or societal good, whilst ensuring that checks and balances are in place to prevent the state and public or private bodies from exceeding their powers which potentially could result in individuals' loss of privacy, disclosure of their personal information, or unauthorised use of personalised information for commercial or criminal purposes. The dangers of the balance of power being shifted too far in the direction of the state, are highlighted in the following example from the UK Government, where they were intending to use third party ICT providers to gather personalised information on a UK-wide scale, which formerly, would almost certainly have been unacceptable to UK society: ''the government is to offer a blank cheque to internet and phone firms that will be required to track everyone's email, Twitter, Facebook and other internet use under legislation to be published today.''[10]

The remaining chapters of the 'Social Perspective' will look at the different societal aspects of surveillance, including changing societal values, such as attitudes and experiences towards security, trust and privacy; surveillance and changing social behaviour, surveillance, exclusion and social sorting; surveillance and (re)construction of personal identity, surveillance and criminological approaches that address feelings of fear and insecurity, different representations of security, and resisting and negotiating surveillance.

1.1 SURVEILLANCE AND CHANGING SOCIETAL VALUES

1.1.1 Societal values

"Value" is a multifaceted term, used in philosophy, psychology, anthropology, economics as well as sociology. From a sociological perspective, values are constituent elements of societal structure, which are used to describe socially conditioned desire. Societal values are ''group conceptions of the relative desirability of things''[11] and attitudes that guide actions of individuals and groups. Being a central notion in social sciences, "values" have been used in a variety of different concepts.[12] The literature specifies five constituent features of the conceptual definition of values, which can be: (1) beliefs; (2) pertaining to desirable end states or modes of conduct, that (3) transcends specific situations, (4) guides selection or evaluation of behaviour, people, and events, and (5) are ordered by importance relative to other values to form a system of value priorities.[13] These are the formal features

[9] Murakami Wood, David, 2009, in Haggerty, Kevin D., and Minas Samatas, (eds.), *Surveillance and Democracy,* Cavendish Publishing Limited, Milton Park, Abingdon, UK, 2010, p.3.

[10] '''Snooper's charter' proposal sparks Tory row'', Travis, Alan, The Guardian online, 14 June 2012, http://www.guardian.co.uk/technology/2012/jun/14/snoopers-charte-proposal-tory-row?INTCMP=SRCH

[11] http://www.sociologyguide.com/basic-concepts/Values.php (21.11.2012).

[12] See Schwartz, S. H., Basic Human Values: Theory, Measurement, and Applications, in: Revue française de sociologie, 47/4 (2006), p. 2.

[13] Schwartz, S. H.. "Universals in the content and structure of values: Theoretical advances and empirical tests in 20 countries." In: M. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 25, pp. 1-65). Orlando, FL: Academic (1992).

distinguishing values from related concepts such as needs and attitudes. They make it possible to conclude that security and independence are values, whereas thirst and a preference for blue ties are not.[14]

In contrast to philosophical and ethical approaches, sociological values are not assessed with regard to their intrinsic worth. They are used to characterise societies and individuals, to monitor changes and to explain "the motivational bases of attitudes and behaviour".[15] Values exist at different levels of generality or abstraction; they tend to be hierarchically arranged; they are explicit and implicit in varying degrees, and values often are in conflict with one another.[16]Being guiding principles followed by individuals and groups, values are the background of essentially all human activities. Why we do something and how we do it, is influenced by our values. Normally single values like "freedom" or "autonomy" do not determine our activities in isolation. Rather it is a bundle of values that influences our reaction to "external" requests and challenges. As values are sometimes conflicting, we have to solve or at least temporarily disregard these conflicts before taking any decision. In order to do so any individual (and community) has implicit priorities of values, describing their relative importance to them. These sets of priorities are not necessarily stable, and they may change over time.

1.1.2 Societal values in European democratic society

Analysing societal values requires clear focus in the definition of the framework of analysis. As there is a multitude of values on different levels, one has to be specific about the level of analysis. With regard to the analysis in the context of IRISS, we can define a specific set of basic values that constitute democracy as the framework of analysis. A specific characteristic and further complication in this endeavour in liberal democracies is the value-pluralism (based on the basic value of tolerance, which again is based in human dignity). In this section we discuss democracy, its respective values and the influence of surveillance on them. Values may vary from individual to individual, from group to group and from nation to nation, and may be influenced by different cultural, religious and historical backgrounds. Fundamental values that are necessary in a democracy have developed over time, from Aristotle, who defined autonomy, autochthony and autarchy as the core of a democratic state, to Montesquieu and Locke, who claimed the separation of powers as a prerequisite for a society's freedom. Locke also pleads for tolerance and states that a government needs to have the consent of its subjects/citizens in order to be legitimate (not demanding a republican organisation of the state). The development of fundamental democratic values has continued with the establishment of the European Convention on Human Rights, which codified the citizen's fundamental rights, which also have to be respected and protected by every member liberal democratic state.

Schwartz, S. H., & Bilsky, W., „Toward a psychological structure of human values.", *Journal of Personality and Social Psychology*, 53, p 550-562.

[14] Schwartz, S. H., *Are There Universal Aspects in the Structure and Contents of Human Values?*, in Journal of Social Issues, Vol. 50, No. 4, 1994, pp. 19-45, http://ns310278.ovh.net:8001/rid=1K6GFZBH9-255VHHF-GZ/Schwartz%201994%20-%20Are%20there%20universal%20aspects%20in%20the%20content%20of%20human%20values.pdf (21.12.2012).

[15] ibid

[16] See http://www.sociologyguide.com/basic-concepts/Values.php (21.11.2012).

Values that are shared within the EU serve as a common ground for analysis. The Preamble of the Treaty of Lisbon[17] states "…the universal values of the inviolable and inalienable rights of the human person, freedom, democracy, equality and the rule of law*"*. These basic values then are duly appropriated in Article 2 and include *inter alia* freedom, security, social justice, combating discrimination and social exclusion as well as sustainable development of our planet, solidarity, eradication of poverty and the protection of human rights. This catalogue presents a broad array of values. Not all of them are directly affected by surveillance. Apart from the general values of the EU listed above there are additional societal values that are constitutive for well-functioning societies. One of the most important is trust, specifically trust in institutions and between people. Another fundamental value is "tolerance" which is based on the idea of human dignity and is indispensable for living together peacefully. Derived from the basic values of freedom and autonomy the concept of privacy emerged[18] and plays a fundamental role in ongoing discussions on surveillance. Taking into account the discussion above, we propose to choose freedom/autonomy, privacy, security, justice, equality, solidarity, pluralism/diversity, tolerance, non-discrimination and trust as basic values which should be analysed with regard to the possible changes which could be influenced by surveillance over time, mainly because many of these rather vague values have been subsequently adopted as fundamental human rights and included within constitutional texts within European democratic society.

Interactions

The following considerations provide guidance in understanding the potential influence of surveillance on societal values. Values are guiding ideas that influence individuals' and groups' actions. As they are often rather vague, abstract concepts, they sometimes may not be communicated easily between members of certain groups, and therefore implicitly known and common values often have to be made explicit. This is frequently done by establishing norms, mostly in the form of laws. These norms in turn are "normalising" the attitudes and experiences of individuals and groups. The impact of phenomena like economic growth, technological development and certain social practices like surveillance may urge members of a specific group to reflect on the actual situation and may induce a change of attitudes, which in turn may lead to adaptations of existing rules. These again may influence the values of the respective group (members). The predominant values in society on the other hand may influence the development of technologies (socio-technical co-evolution), or have an impact on economic growth, and may even influence the way in which surveillance occurs.

This model does not imply a straightforward, linear or direct causality (determinism) between social practices like surveillance and the change of fundamental values. It rather shows the complexity and interdependency of the phenomena involved and emphasises the need to analyse these complex relationships and dynamics. It therefore calls for interdisciplinary analysis. In order to sketch the full picture, sociological analysis of potential changes of values, analysis of the political system by political sciences and analysis of the legal framework are needed. Making it more complex, the speed of potential change seems to be different in certain domains. For example, there could be situations where the legal

[17] European Union (2010): Consolidated versions of the Treaty on European Union and the Treaty on the functioning of the European Union and Charter of Fundamental Rights of the European Union, ISBN: 978-92-824-2577-0, DOI: 10.2860/58644.

[18] Pauer-Studer, H., „Privatheit: ein ambivalenter aber unverzichtbarer Wert", W. Peissl (Ed.) *Privacy: ein Grundrecht mit Ablaufdatum? Interdisziplinäre Beiträge zur Grundrechtsdebatte,* Verlag der Österreichischen Akademie der Wissenschaften, Wien (2003), p. 9-22.

framework and the political system may react faster to supposed external challenges (ad hoc legislation), while it might take a rather long time to realise changes in societal values.

Societal changes

In recent years we can observe a shift from a "punishing" state to a "preventive society" (often, the terror attacks from 9/11/2001 in New York and subsequently in London and Madrid, are seen as the events that boosted this process). Allegorically, it can be described as a shift from Bentham's *Panopticon*[19] to the film *Minority Report.*[20] In former times it was sometimes deemed sufficient to punish convicted offenders either to restore the status before the crime (restorative justice), or to act as an example for others (pour encourager les autres) to prevent them from doing the same (often seen as fairly cynical kind of revenge). Following these relatively recent terrorist attacks, many law enforcement authorities have tended to focus on preventing major crimes, especially ones with the potential for causing major disasters and subsequent harm to large numbers of citizens. Extrapolating the current developments in a way described in *Minority Report*, leads to different and delicate questions being asked about freewill versus determination (can someone be arrested before committing a crime – to prevent others from causing serious damage? When is the right moment to decide whether or not the crime would have been committed anyway, and can a person be arrested for trying it?). The activities of the state can also include the assignment of agent provocateurs, who support suspects in their preparations (while surveilling them) to help them execute their plans – this can lead to more wider, unintentional surveillance of society.

Another way to describe the ongoing process of change is the concept of a security society.[21] Formerly the Leviathan or the Big Brother concepts evoked a civil defence-reflex. Nowadays the desire for security is apparently strong enough to accept the transformation to a state with ever increasing control regimes and control structures.[22] This strong desire for more security is directly connected to the concept of dangerisation[23] where people tend to detect threats in every difference to the image they have of themselves or the society in which they live. From the end of the nineteenth century, surveillance methods were used for example in workplaces with the monitoring of workers, which led to the fragmentation of their tasks, the separation between manual and mental tasks and tight regulation of working conditions was set up.[24] In some working environments CCTV cameras and strict time keeping are still in place, and CCTV surveillance is still being used in some cases to bring about socially desirable behaviour, which has also helped form our conception of what constitutes an acceptable scale of surveillance.

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[19] See i.a. Foucault, Michel, *Surveiller et punir. La naissance de la prison.*, Editions Gallimard, Paris,1975.

[20] http://en.wikipedia.org/wiki/Minority_Report_%28film%29 (23.11.2012).

[21] Bogner, A., „Sicherheitsgesellschaft", *Gesellschaftsdiagnosen – Ein Überblick*, Beltz Juventa, Weinheim und Basel 2012, pp 93-109.

[22] Groenemeyer, A., "Von der Disziplinargesellschaft zur Sicherheitsgesellschaft", in A. Gorenemeyer (Ed.), *Wege der Sicherheitsgesellschaft*, VS Verlag für Sozialwissenschaften, Springer Fachmedien, Wiesbaden, 2010.

[23] Lianos, Michalis and Mary Douglas, "Dangerization And The End Of Deviance", The British Journal of Criminology, Vol. 40, No. 2, 2000, pp. 261 – 278.

[24] Zureik, Elia, "Theorizing surveillance – the case of the workplace", in David Lyon (ed.): *Surveillance as Social Sorting*, Routledge, London, 2003, pp. 31-56.

1.1.3 Potential influence of surveillance on societal values

The complex relationship between societal values and norms on one hand, and "external" challenges, and social practices like surveillance and techno-economic phenomena on the other hand, is hard to analyse and grasp empirically. Based on theoretical considerations and observations made, some potential influences of surveillance on certain values are described in the following sections.

Freedom

Individual freedom and autonomy are prerequisites for democratic states. Norms operationalising these values include the rights of freedom of speech, political freedom, freedom of association, freedom of assembly etc. These basic rights appear to be in danger in recent times, as due to a seemingly omnipresent threat of terror attacks, the demand for increased security seems to result in every measure which promises more security, being easily accepted without further questioning.[25] The views on freedom and security in their most unrestrained meaning, can lead to an open conflict of values, described as trade-off, excluding the idea that the individual within a society will never be completely free or completely secure (zero-risk-utopia), but the necessary freedom and security need both to be guaranteed to the individual at the same time.

Security

One of the most prominent duties of a state is to guarantee everybody's security (also protecting the ones that can't protect themselves). And in times of great threats (or perceived dangers – see dangerisation above) security is an overarching argument for utilising available technologies which can potentially be used for establishing even greater security. People often forget that implementing these technologies without questioning their usefulness and considering their disadvantages can be counter-productive. Sometimes the fact that security is not absolute but is something which has to be negotiated and then to become established, can be eclipsed. In some areas societal security, such as problems caused by anti-social behaviour is being approached by the use of technical solutions, and while it is clear that CCTV cameras for example will not stop drug dealers, they may just displace the business to other locations. Since the terrorist attacks in 2001, security has become big business and it is not always clear whether it is fear which fuels the wish for more security or the publicly displayed security technologies which generates that fear.

Justice/rule of law

The rule of law is not *per se* a democratic value, it is a necessary condition of every democracy. In the European context the so called "Rechtsstaat" can be explained as a combination of the Anglo-American concept of the rule of law, where the exercise of governmental power is constrained by the law, and justice/moral righteousness. This principle also guarantees predictability (contrary to arbitrariness) in jurisdiction. A possible influence of surveillance could be the increasing power of the state, which can in turn be assigned to law enforcement agencies by very vague anti-terror-legislations throughout Europe. This makes it harder for citizens to predict the outcomes of any action they might consider taking, since it is not clear or defined what constitutes enough suspicion for them to be detained, for example (for up to 28 days) under the UK Terrorism Act of 2006. Justice on

[25] Schneier, Bruce, *Beyond Fear*, Copernicus Books, New York, 2003.

a more general level shows that the difference in power between those undertaking surveillance and the surveilled, can be the source of inherent injustice.

Privacy

Privacy[26] is a fundamental pillar of modern democratic society, a condition *sine qua non.* A democratic state is founded upon the rights of citizens who are able to decide freely, for example in exercising the decision about which political party gets your vote. But also, other information has to be protected, such as which citizens receive state support, financial assistance, health records, the intimacy of the living place, information about sexual orientation and so forth. Citizens have to be able to decide freely how to live. The value of privacy has to be balanced carefully against other values in a democratic society like security, or free speech.[27] Since different surveillance measures deliberately or inadvertently collect some or all of this protected information, and in some cases try to put pressure on for conformity and social control of citizens, these technologies and practices may have to be regulated in their use. Some of these matters are regulated either in data protection laws and/or in the respective constitutions in every country within the European Union. Above that, the right to privacy is guaranteed in the European Convention on Human Rights, Art. 8,[28] as explained in IRISS D2.3.

Equality/non-discrimination

Matters like equal opportunities or insured personal financial/health risk versus societal solidarity are covered in the chapters on Surveillance and Equality and Surveillance and Social Sorting.

Trust

For the prevention of crime, law enforcement authorities may want to know as much information as possible. This can lead to surveillance measures being introduced like the data retention directive,[29] which undermines the presumption of innocence. It is widely seen as a regulation that puts all of the European Union's citizens under general suspicion. Often the argument pro surveillance is: if you don't have anything [illegal] to hide, there is no need to be afraid of such measures. Of course this is problematic since it results in shifting the burden of proof to the presumptively innocent citizen. Wrong suspicions can lead to far-reaching police investigations, to biases, prejudgements, to preliminary searches of the home and more surveillance and observation. If everyone can potentially be a terrorist, trust in your fellow citizen can be easily jeopardised. But people generally have a more trusting attitude towards technology when it comes to impartiality and error-rates, and depending upon people's everyday experiences of surveillance technologies, the use CCTV for example can help people to feel more secure in poorly lit car parks.

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[26] As defined in: Rössler, Beate, *Der Wert des Privaten*, Suhrkamp Verlag, Frankfurt am Main, 2001.

[27] US Dept. of Health, Education and Welfare, Section III Safeguards for Privacy, *Records, Computers and the Rights of Citizens, Report of the Secretary's Advisory Committee on Automated Personal Data Systems*, 1973.

[28] *The European Convention for the Protection of Human Rights and Fundamental Freedoms*, http://conventions.coe.int/Treaty/Commun/ListeTraites.asp?MA=3&CM=7&CL=ENG (23.10.2012).

[29] European Parliament and the Council, Directive 2006/24/EC of the European Parliament and of the Council of 15 March 2006 on the retention of data generated or processed in connection with the provision of publicly available electronic communications services or of public communications networks and amending Directive 2002/58/EC: http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32006L0024:EN:NOT (23.10.2012).

Different Eurobarometer surveys[30] also show that trust in national governments for example, differs very much between countries and particularly so between those countries with long histories of democracies and those with experience of dictatorships and oppression in the past century. In Scandinavian countries, trust in governments and their actions, is significantly higher than in Eastern European countries. In general, surveillance in the relationship between government and citizens may be seen as one of control, which could mean less trust in the authorities by its citizens.

Solidarity

Solidarity has the distinct advantage by collectively supporting those citizens who would have trouble in being heard in a society where the right of the mighty rules. However, distrust and the ongoing individualisation in western societies can undermine this value. As soon as everybody leaves digital traces which are recorded and monitored it is an easy step to let people pay for the consequences of their risky behaviour; e.g. smokers could pay more for their health insurance. But the next step could be that people have to bear the consequences of parameters in their lives which they cannot influence. Persons with a genetic predisposition for a certain kind of cancer could for instance lose support from the society, which would lead us to a survival of the fittest mind-set and impoverishment of societies.

Pluralism/diversity/tolerance

As soon as equality and human dignity of all people are admitted and the diversity of all humans living in a city/state/union/on earth is recognised, the inevitable pluralism of our societies becomes apparent. To deal with these differences, needs respect and tolerance between citizens, with pluralistic societies tending to have an advantage over more homogenous ones when it comes to cultural dynamics, richness and innovation, advantages that fuel the economy of a state. The normalising effects of surveillance may therefore lead to slowing down of the economy:[31]

"The man who is compelled to live every minute of life among others, and whose every need, thought, desire, fancy or gratification is subject to public scrutiny, has been deprived of his individuality and human dignity. Such an individual merges with the mass. His opinions, being public, tend never to be different. His aspirations, being known, tend always to be conventionally accepted ones. His feelings, being openly exhibited, tend to lose their quality of unique personal warmth and to become the feelings of every man. Such a being, although sentiment, is fungible; he is not an individual.*"*[32]

A democratic system cannot exist without the pursuance of certain fundamental values because such a system can only function with free individuals and therefore needs common values guaranteeing this freedom. The individuals govern their own life and the group governs the affairs of the community.[33] Therefore, the values that establish the individuals' freedom and the ones necessary for the autonomy of the group are indispensable for a democratic system. If social practices like surveillance interfere with these fundamental values, they interfere with the structure of the democratic system. The more these social

[30] http://ec.europa.eu/public_opinion/cf/index.cfm?lang=en (23.10.2012).

[31] Peissl, W., "Surveillance and Security – a dodgy relationship.", *Journal of Contingencies and Crisis Management*, Vol. 11 (1 March 2003), p. 19-24.

[32] Bloustein, Edward J. *Individual & Group Privacy (2nd Ed.);* Transaction Publishers, New Brunswick, NJ, 2003, p.42.

[33] Cohen, C., „The intrinsic values of democracy", *Democracy*, University of Georgia Press, Athens, 1971.

values are put under pressure, the more fragile becomes the system itself. Trying to protect the system by using more surveillance measures which influence the fundamental values of the democratic society can therefore be dangerous. Of course surveillance measures are not deployed with the intent to ruin the system's basis. In a broader sense of what is surveillance, the state should provide transparency, accountability, security and care[34] for the citizens. That is why the balanced implementation of measures interfering with values should always be guided by the value system that is the common ground on which the respective democratic system is built.

1.2 SURVEILLANCE AND CHANGING SOCIAL BEHAVIOUR

For nearly four decades, every theoretical reflection concerning the functionality of surveillance in terms of risk and security has been influenced by the paradigm of panopticism.[35] Foucault's technical term "panopticism" describes new modes of surveillance and punishment which predominated during the late 18th century and aimed at the alteration of individual behaviour through authoritarian observation. Continuous observation from a central prison tower is argued to have brought about long-term "disciplining". Within such a paradigm, risk primarily exists in the form of exclusion – whoever does not submit must be prepared for continued imprisonment. The welfare of the liberal society and the integrity of the population were secured by the education of "disciplined subjects" and "docile bodies". This concept also characterises the early stage of surveillance studies, which was interspersed with numerous conceptual modulations of panopticism, e.g., "super panopticon", "ban-opticon", "global panopticon", "panspectron", "myoptic panopticon", "fractal panopticon", "urban panopticon", "pedagopticon", "polyopticon", "cyberpanopticon", "social panopticism". Even in the recently published "Handbook of Surveillance Studies", an entire chapter can still be found with the title: ''After Foucault'', which examines the current utility of panoptic analysis.[36] In the face of increasingly meticulous and nuanced differentiations of the term, Haggerty makes the proposal to consider overcoming this paradigm.[37] A fundamental consensus can indeed be identified in all recent approaches as regards the shortcomings of this paradigm for the analysis – or at least – for the description of the current situation.

1.2.1 The ''contemporary condition''

An important point in post-panoptic analysis was mentioned by Lianos.[38] He also criticises the blind loyalty to a metaphor evinced by current surveillance studies, and as a consequence posits a concept "that refers directly, and not by analogy, to the contemporary condition." According to Lianos, this "contemporary condition" is characterised by the diminished

[34] Haggerty, Kevin D. and Minas Samatas, Introduction: Surveillance and democracy: an unsettled relationship, in: Haggerty, Kevin D. and Minas Samatas (Ed.), *Surveillance and Democracy*, Routledge-Cavendish, Abingdon, Oxon, 2010, pp 1-16.

[35] Foucault, Michel, *Discipline and Punish: The Birth of the Prison*, Knopf Doubleday Publishing Group, New York, 1995.

[36] Ball, Kirstie, Kevin D. Haggerty and David Lyon, *Routledge Handbook of Surveillance Studies*, Routledge, London/New York, 2012

[37] Haggerty, Kevin, "Tear down the walls: On demolishing the panopticon", in David Lyon (ed.), *Theorizing surveillance: The panopticon and beyond*, Willan, Cullompton, UK, 2006, pp. 23-44.

[38] Lianos, Michalis: "Social Control after Foucault", *Surveillance & Society* Vol.1, No.3, 2003, pp 412-430. (ibid.: 413)

occurrence of social control. Instead of behaviour defined by evaluation, reward, toleration, condemnation, or prohibition arising from social interaction, a more indirect and standardised mode of control can be increasingly identified as "an institutional web ever more dense and efficient in the provision of services." This institutional web can be characterised as follows: The registration and surveillance of individual behaviour does indeed occur *more frequently* and throughout all spheres of life. But unlike typical connotations with technological modes of operation may suggest, this is seen to *be more than merely an objective, "unobtrusive" mode of ascertainment*. Surveillance as such is argued to occur at the level of an observed behaviour which has already assumed a normative structure – or at least – has already become contextualised. Lianos speaks of "shaping and monitoring the environment" instead of "control of the people" and refers to technical security devices to prevent shoplifting in department stores as an example: The behaviour of customers as such is not observed, but rather, the exit is demarcated as a kind of limit which *must* be crossed upon departure without any signal, otherwise it is classified as theft no matter what the intention was. The agreement of the customer to this procedure already exists when entering the department store – thus, compliance in this context is never a matter of individual negotiation, but is implicitly assumed. Different examples for the same constellation may be the regular monitoring of "consumption habits, health profiles, occupational performance, financial transactions, communication patterns, Internet use, credit history, transportation patterns and physical access".[39] These are all acts of observations that cannot be avoided by the individuals, as well as they do not demand a certain type of behaviour, but the regimented implementation of activities as such already represents the final aim of surveillance.

Ericson and Haggerty furthermore suggest a view that challenges classical positions on what is to be called "behaviour" and therefore becomes an object of surveillance. Although the human body is the object of surveillance at first sight, surveillance is actually targeted at a number of "discrete signifying flows […] that emanate from or circulate within the body" – for example cameras capturing the flows of reflected light waves, body scanners on airports interpret the reflected energy, drug tests striating the flows of chemicals. Another very important aspect of the "contemporary condition", also pointed out by Ericson and Haggerty, is "[the appreciation] that surveillance is driven by the desire to bring systems together, to combine practices and technologies and integrate them into a larger whole […] with such combinations providing for exponential increases in the degree of surveillance capacity." The "surveillant assemblage" exists "as a potentiality, one that resides at the intersections of various media that can be connected for diverse purposes." Also Lyon sees this when saying that "[i]t is sometimes not until some system is installed for another purpose that its surveillance potential becomes apparent."[40]

So the contemporary condition can be summed up as exercising countless acts of surveillance throughout everyday life, thereby shaping the way we perform our activities and eliminating certain forms of behaviour. Furthermore a lot of knowledge about us is collected that we are not even aware of and that we cannot influence. Lyon calls it an "explosion of personal data", which produces massive amounts of data which become the actual target of surveillance (see

[39] Haggerty, Kevin D. and Richard V. Ericson, "The Surveillant Assemblage", *British Journal of Sociology*, Vol 51, No. 4, 2003, pp. 605-622.

[40] Lyon, David, "Surveillance, power, and everyday life", in Chrisanthi Avgerou, Robin Mansell, Danny Quah, Roger Silverstone (eds.): *The Oxford Handbook of Information and Communication Technologies*, University Press, Oxford, 2009.

also the term "dataveillance").[41] Surveillance hereby creates knowledge about individuals, even assigns identities to individuals ("data-doubles") that remains unknown to the specific person but surely affects the person's "life choices and chances".

1.2.2 Theoretical interpretations

Given the characteristics of late-modern surveillance practices, the panoptic paradigm has at least two deficits. One, there exists a logical discrepancy between surveillance strategies as described by Foucault and current constellations: "Panoptic surveillance reacts to events – it notices, identifies and categorizes them, passing this information on to authorities that determine its ultimate significance."[42] In contrast, institutional forms of control as described above are essentially "proactive", due to a new understanding of security: they become contextualised in advance, the categorisation ensues automatically, and the "significance" of behaviour is not a consequence of a "decision", but the significance has already been determined during the foregoing procedural execution. Two, no motivation and/or moral perspective on the part of the customer possesses any significance, only the outcomes of actions are observed, while unwanted actions (deviant behaviour) are sought to be eliminated beforehand. This means that contemporary surveillance, for example when used to construct and monitor consumption patterns, "usually lack the normalized soul training which is so characteristic of panopticism."[43] To date, the most successful attempt within social theory to interpret developments surpassing the "simple" disciplinary society is the "theory" of the control society originated by Deleuze.[44] In Kammerer's view, the arguments expounded by Deleuze are usually cited in abbreviated form and presented as merely a loose panoptic regime directed more at contexts than at individuals.[45] In recent years, however, a more focused awareness has also emerged for "surveillance cultures".[46] The shaping and influence of attitudes and mentalities through the media (whether it be in the form of literature, film, or television), for example, contains many regulatory elements: the character of real time exists (i.e., surveillance occurs *en passant*, just as the aim of surveillance has already been achieved in the very implementation of the process), no substantially binding consensus exists between institution and individual (i.e., the point at issue is not the enforcement or continuation of a particular normative structure), and the significant factor is an expectation of conformity which is concerned with observable behaviour.

In contrast to the disciplinary society, the *modus operandi* here does not lie in the restriction of behaviour (action, communication), but in the incessant coercions and incentives to behave in a particular way. The registration and regulation of behaviour allow the control society to generate ever more instances of *accountability*. In a control society characterised by

[41] Clarke, Roger, "Information Technology and Dataveillance", *Communication of the ACM*, Vol. 31, No. 5, 1988, pp. 498-512.

[42] Bogard, William, "Simulation and Post-Panopticism", in Kirstie Ball, Kevin D. Haggerty and David Lyon (eds.), *Routledge Handbook of Surveillance Studies*, Routledge, London/New York, 2012, pp. 30-37.

[43] Haggerty, Kevin D. and Richard V. Ericson, "The Surveillant Assemblage", *British Journal of Sociology*, Vol. 51, No. 4, 2003, pp. 605-622.

[44] Deleuze, Gilles "Postscript on the Societies of Control", in *OCTOBER*, Vol 59, MIT Press, Cambridge/MA, 1992, pp. 3-7

[45] Kammerer, Dietmar, "Das Werden der ›Kontrolle‹: Herkunft und Umfang eines Deleuze'schen Begriffs", in Nils Zurawski (ed.), *Überwachungspraxen — Praktiken der Überwachung: Analysen zum Verhältnis von Alltag, Technik und Kontrolle*, Budrich UniPress, Opladen, 2011, pp. 19-34.

[46] Monahan, Torin, "Surveillance as cultural practice", *Midwest Sociological Quarterly*, Vol. 52 No. 4, 2011, pp. 495–508.

unremitting surveillance, every social position attained, every consequence of action becomes accountable as a result of observed behaviour, or more accurately – every attainment or non-attainment of individual goals can be reinterpreted as a consequence of conformist or non-conformist behaviour, whereby the requirements needed for conformist behaviour have been firmly explicated in advance.

A specific theoretical approach based on the work of Deleuze (and his colleague Guattari) highlights the term "surveillant assemblage".[47] It is an alternative to the panoptic theories criticised above as well as to "Orwellian" interpretations of surveillance as only a state-centred regime. It is much more about the combinations of state and extra-state institutions that can emerge "ad hoc" (like for example in the aftermath of 9/11 a lot of data sources were combined for the purpose of identifying suspects) or become institutionalised. The "emergent and unstable characteristic" of the surveillant assemblage also makes it immune to classical forms of critique: "As it is multiple, unstable and lacks discernible boundaries or responsible governmental departments, the surveillant assemblage cannot be dismantled by prohibiting a particularly unpalatable technology. Nor can it be attacked by focusing criticism on a single bureaucracy or institution." Even the purposes of specific surveillance practices cannot be identified precisely - in most cases "desires for control, governance, security, profit and entertainment" have influence on a given constellation. However, what all elements of the surveillant assemblage have in common, is that "privacy" can no longer be upheld as a well-defined sphere, but it is subject to – more or less democratic – negotiations. Another interesting concept is developed by Lianos.[48] His theory of the periopticon functions at a more specific level. Lianos identifies three indicators which are particularly characteristic for the development of the surveillance society: "privatisation", "dangerisation", and "periopticity". "Privatisation" means the entirely individualised relationship between institutions and the monitored population. Even if *institutional networking with a tendency towards convergence* is indeed a characteristic of the surveillance society (which is often perceived as totalitarian), surveillance still remains an individual, and not a collective experience. "Dangerisation" describes the increased anxiety surrounding the security of institutionally regulated processes: the more their efficacy is dependent upon conformist behaviour, the more surveillance becomes focused on the (never completely successful) isolation of danger generators (people, actions, objects). Arising from this ever increasing uncertainty, generalised suspicion (such as the example of anti-shoplifting devices mentioned above, security measures at airports, or the storage of telecommunications data) meets with remarkably weak resistance.[49] Lianos notes elsewhere that – due to such control measures - a culture of ''trustworthy behaviour'' is no longer rewarding. Finally, "periopticism" refers to an inversion of "Big Brotherism": power is no longer associated with the most comprehensive view of a periphery from a centre, but much rather, there exists numerous institutional "trajectories" drawing their power from the heightened perspective of the periphery. Thus, the process of viewing shifts from the "guardian of the panopticon" to the population: the latter becomes activated and must itself become an active part of the surveillance procedure. This has dual implications. On the one hand, conditional freedom of choice is generated, and in addition to this, institutions themselves become the object of

[47] Haggerty, Kevin D. and Richard V. Ericson, "The Surveillant Assemblage", *British Journal of Sociology*, Vol 51, No. 4, 2003, pp. 605-622.

[48] Lianos, Michalis, "Periopticon: Control beyond freedom and coercion and two possible advancements in the social sciences", in Kevin D. Haggerty and Minas Samatas (eds.), *Surveillance and Democracy*, New York, Routledge, 2010, pp. 69-88.

[49] Lianos, Michalis, "Social Control after Foucault", *Surveillance & Society* Vol.1, No.3, 2003, pp. 412-430.

surveillance (Mann et al. speak of "sousveillance" in this respect[50]); on the other hand, attempts to refrain from such complex networking practices – i.e. "non-compliance" - can increasingly become interpreted as a danger to the functionality of the system as a whole. This repeats, in a way, the genuine imperative of the control society cited above, to incessantly behave, to act explicitly, to thereby hold oneself accountable. Because, as Lianos puts it: ''Disenchantment is already non-compliance.''[51]

1.3 SURVEILLANCE AND EQUALITY: SOCIAL SORTING, SOCIAL EXCLUSION AND PROFILING

Equality can be defined as 'freedom from discrimination' and is one of the main principles guiding the Universal Declaration of Human Rights and most legal texts in the Western world. The protection from discrimination takes different legal forms, but it usually includes the right to not be discriminated for reasons of 'race, color, sex, language, religion, political or other opinion, national or social origin, property, birth or other status'[52] and the right to be equal before the law. In spite of this normative backdrop, institutional sorting and categorisation of individuals is a key feature of modern societies. The modern relationship between the state and society for example is characterised above all by three distinctions, which are stabilised by surveillance systems, among other things[53]: the distinction between nationals and foreigners (usually determined by the place of birth and implemented by residents' registration offices and the obligation to possess an identity document); the distinction between men and women (through a cultural and medical monitoring system which rules out intersex or transgender people[54], which initially justifies unequal treatment (legal or economic) but subsequently also makes it criticisable; the distinction between the employed and the unemployed (through statistic registration as a prerequisite for benefits in case of unemployment), which forms a fundamental difference in the modern welfare state.[55] Equality has thus only ever been accomplished to a limited extent in modern societies.

In the following sections we will show, how that value of equality is nowadays challenged in new forms by contemporary surveillance technologies. How far are the outcomes as well as the modes of surveillance problematic in face of equality assumptions? What are the concerns for privacy? We will discuss this conflict on a general level, referring to technical details as well as practical issues; we will try to shed light on new forms of inequalities and new ways of how they are produced, analyse the link between social exclusion and surveillance,

[50] Mann, Steve, Jason Nolan and Barry Wellman, Sousveillance: "Inventing and Using Wearable Computing Devices for Data Collection in Surveillance Environments", *Surveillance & Society* Vol 1, No. 3, 2003, pp. 331-355.

[51] Lianos, Michalis, "Periopticon: Control beyond freedom and coercion and two possible advancements in the social sciences", in Kevin D. Haggerty and Minas Samatas (eds.), *Surveillance and Democracy*, New York, Routledge, 2010, pp. 69-88. ibid: 79.

[52] Article 2 of the Universal Declaration of Human Rights.

[53] Graham, S. and David Murakami Wood, (2003: 228). "Digitizing Surveillance: Categorization, Space, Inequality," in *Critical Social Policy*, 2003, 23: 227-248

[54] van der Ploeg, Irma, (2012: 182): "The body as data in the age of information," in: Ball, K., Haggerty, K.D., and Lyon, D.: Routledge Handbook of Surveillance Studies, London/New York: Routledge, 2012, pp. 176-184.

[55] For a criticism of such "binary" differentiations, see cf: Bonß, W. and Lau, C.: "Einleitung. Zum Strukturwandel von Macht und Herrschaft in der Zweiten Moderne," in: Bonß, W. and Lau, C.: "Macht und Herrschaft in der reflexiven Moderne", Velbrück-Wissenschaftsverlag, pp. 7-26. Beck/Bonß/Lau (2001, 2004, 2009).

whereas finally, we will focus on profiling as a surveillance practice and on the discriminating effects that may result from it.

1.3.1 Surveillance and equality

The surveillance literature has approached the relationship between social control and equality mainly through the lens of social sorting. As described by Lyon,[56] surveillance codifies the personal information of those it surveils, and establishes categories that assign value or risk across a range of social sectors. There is abundant literature exploring the social consequences of categorisation, especially in CCTV-monitored urban space[57] and at border crossings[58] (but also hospitals, health-care, in transit, administration, in workplaces and the internet). This research concludes that social sorting is having a significant impact on people's choices and life-chances, and thus impacting on basic principles such as equality. But while social sorting necessarily involves discrimination, this would not be a problem *per se* if stereotypes and prejudice could be removed from the surveillance infrastructure and categorisation methods – if surveillance technologies could be 'neutral'.

But if surveillance devices and practices are understood as socio-technical systems, they cannot be understood separately from the world and the dynamics of power, privilege and discrimination by which society operates. In discussing surveillance systems in public housing and gated communities, for instance, Monahan[59] notes how 'rather than being neutral, the system coproduces unequal power relations by design', and adds that 'because technologies are underdetermined, existing conditions of inequality inflect technologies and technological systems, reproducing unequal social orders'. As socio-technical devices, thus, surveillance technologies both capture and reproduce inequalities of all sorts. As an example, several authors have noted how CCTV operators tend to focus more on young, black men, thus discriminating the surveilled due to age, race and gender.[60] And while the cameras tend to focus on men, women are subject to the electronic eye both for 'voyeuristic reasons' and the belief that women tend to commit specific crimes, such as shoplifting, more than men, and thus should be monitored more in specific environments.[61]

This leads us to a related question – power inequality and surveillance. Inequality of power refers to the inherent inequality in the social, political and economic infrastructure that both makes surveillance possible and determines its consequences. The issue here is to focus not only on who is watching, but who *can* watch – who has the means and the authority to be on the surveying side, and, at the other end, who can't escape the electronic eye. This approach highlights the imbalances of power between the surveillants and the surveilled, highlighting how their position in relation to the surveillance device is not coincidental, but reproduces pre-existing imbalances of power –between the rich and the poor, the 'normal' and the 'deviant', the state and corporations vs. 'ordinary people'. This approach also brings forward

[56] Lyon, David, *Surveillance as Social Sorting. Privacy, Risk, and Digital Discrimination*, New York: Routledge, 2003.
[57] Graham & Wood.
[58] Inter alia, Lyon, David. 'Surveillance, Security and Social Sorting : Emerging Research Priorities', *International Criminal Justice Review* 17 (3), 2007, pp. 161-170.
[59] Monahan, Torin, *Surveillance in the Time of Insecurity*. New Brunswick: Rutgers University Press, 2010.
[60] Norris, Clive and Gary Armstrong, 'CCTV and the social structuring of surveillance', *Crime Prevention Studies*, 10, 1999, pp. 157-178.
[61] Morgan, Heather M., 'Visions and Visibility: Gender, Crime and Difference', in Jones, R., van Koten, H., Murray, C., Williams, K. (eds), 'Debating the Difference: Gender Representation and Self-Representation'. Duncan of Jordanstone, University of Dundee, 2010.

the spatial inequalities derived from the creation of 'digital enclosures'[62], 'privatized interactive spaces (virtual or otherwise)' where there are 'those who control […] and those who submit to particular forms of monitoring in order to gain goods, services and conveniences'.[63] Entering these 'enclosures' is not always voluntary or avoidable (if it's a particular neighbourhood of a city where one lives, or a country where one is looking for asylum, or a formality one needs from government, for instance), and so inequalities are again deepened by the fact that one is classified and categorised using surveillance mechanisms.

Another related aspect still emerging in the surveillance literature and relevant to equality is digital discrimination. As Graham and Wood state, 'digitalization […] allows the active sorting, identification, prioritization and tracking of bodies, behaviors and characteristics of subject populations on a continuous, real-time basis'.[64] The proliferation of digital technologies and techniques is changing the intensity and scope of surveillance, and this amplifies some of the social consequences already identified in the use of surveillance, such as the embeddedness of political, social and economic conditions in automated processes. At the same time, it facilitates exclusionary and discriminatory practices that go beyond the digital divide. As Jupp puts it, 'Rather than being based exclusively on uneven access to the Internet, the digital divide in contemporary societies is based on the broader disconnections of certain groups from IT hardware and the growing use of automated surveillance and information systems to digitally red-line their life chances within automated regimes of service provision'.[65] The key here is 'social prioritization', where 'certain people's mobilities, service quality and life chances [are prioritised] while simultaneously reducing those of less favoured groups.[66] Premium and non-premium users/citizens thus emerge, and pre-existing inequalities are thus deepened, consolidated and engineered into surveillance devices and practices.

Nonetheless, as some have highlighted, surveillance can also *promote* equality, or reduce instances of discrimination by privileging algorithmic surveillance over human discretion and bias. Surveillance can also 'radically alter orthodox relations of power by evading the information controls of the state and connecting a local gaze with the global community', and so enable and promote 'democratic impulses'.[67] However, as Marx notes 'There is nothing inherent in the technology that pushes it toward or away from equity. Rather, equity depends on the context and uses of the technology.'[68] Moreover, with the ubiquitous character of contemporary surveillance, the potential beneficial effects of surveillance and categorisation (IDs, for instance, can promote inclusion into the polity, as can the broadening of certain databases to incorporate those previously excluded or ignored) may be obscured by the fact that with the proliferation of tracking systems and devices, the possibility of escape is almost

[62] Andrejevik, Mark. *iSpy. Surveillance and Power in the Interactive Era,* Kansas: University Press of Kansas, 2007.
[63] Íbid, pp. 3
[64] Graham, Stephen and David Wood. 'Digitalizing surveillance: categorization, space, inequality. Critical Social Policy, 2003, 23 (2), pp. 227-247.
[65] Jupp, Ben. *Divided by Information?* London: Demos, 2001.
[66] Graham & Wood, pp. 232.
[67] Green, Stephen, 'A plague on the panopticon: surveillance and power in the global information economy'. *Information, Communication & Society*, 2 (1), 1999, pp. 26-44.
[68] Marx, Gary T. 'The engineering of social control: the search for the silver bullet', in J. Hagan and R. Peterson (eds.) *Crime and Inequality*. Stanford: Stanford University Press, 1995, pp. 225-246.

non-existent -and so life becomes harder for those who, for whatever reason, justified or not (false positives) end up on the wrong side of categorisation.

1.3.2 Surveillance and privacy concerns

Whitson and Haggerty discuss the problem of stolen identities: that, based on the increased collection of data from all areas of life, and the connection of multiple data sources, there is an increased danger of abusing the resulting profiles, whether for commercial or even criminal interests.[69] However, they point out that introducing secure standards instead of „lax data handling practices" demands high financial efforts, so that there is a constant „gambling with [...] customers private information".[70] In Gilbert's view, the problem of identity theft from above is presented in an ever more fatal way: databases holding sensitive information are subject to the same risk of damage in the broadest sense – mechanical failure, software bugs, human error, sabotage – and up to now, not enough effort has been devoted to ensuring the maintenance or restorability of these databases. Gilbert fears that „millions could be inconvenienced or even have their lives put into danger".[71] Closely linked to this, he demands the replacement of identification-based systems (asking who are you?) by authentication-based systems (are you - whoever you are - allowed to perform some activity?), thus obviating many privacy protection issues. Edwardes, Hosein and Whitley discuss the introduction of identity cards in Britain, showing clearly how the effects and purposes of a certain technology, once it has been introduced, can still change and develop.[72] They say that „[t]he purpose of the [ID-Card] scheme continually shifted as the government moved from preventing benefit fraud, to tackling terrorism, then to preventing identity fraud, without ever fully understanding the nature of these problems to begin with. Moreover, the most invasive design was chosen: under the Scheme, all UK residents and citizens will be fingerprinted, and these fingerprints will be available for comparison with those left at scenes of crime".[73] Effectively, every citizen would be treated like a possible suspect whenever fingerprints are found, and he/she would have to live with all the negative consequences of this (e.g., interrogation and increased surveillance).

1.3.3 Surveillance and social sorting

This chapter is aimed at systemising the current state of research into the phenomenon of "social sorting". "Social sorting" is the creation of social inequalities caused by the introduction or increased use of surveillance technologies. The analysis of CCTV images, surveillance measures at critical infrastructures (e.g. airports) or data mining practices result

[69] Whitson, Jennifer, and Kevin D. Haggerty, "Stolen identities", *Criminal Justice Matters*, Vol. 68, No. 1, 2007, pp. 39-40

[70] Whitson, Jennifer, and Kevin D. Haggerty, "Stolen identities", *Criminal Justice Matters*, Vol. 68, No. 1, 2007, p. 40.

[71] Gilbert, Nigel, "Dilemmas of privacy and surveillance: challenges of technological change", *Criminal Justice Matters*, Vol. 68, No. 1, 2007, pp. 41-42.

[72] Edwardes, Cheryl A., Ian Hosein and Edgar A. Whitley, "Balance, scrutiny and identity cards in the UK", *Criminal Justice Matters*, Vol. 68, No. 1, 2007, pp. 29-30.

[73] Edwardes, Cheryl A., Ian Hosein and Edgar A. Whitley, "Balance, scrutiny and identity cards in the UK", *Criminal Justice Matters*, Vol. 68, No. 1, 2007, p. 30. The ID card scheme was abolished when the Government changed hands in 2010.

in "social sorting" when they lead to a distinction being made between different groups of persons which results in unequal treatment. With a view to social inequality (as a widely and thoroughly researched subject area of sociology), a purely logical differentiation of the influence of new surveillance technologies is appropriate. This raises the following questions:

- Which (new) inequalities will result from the use of new surveillance technologies?
- How are existing inequalities exacerbated/levelled out by the use of new surveillance technologies?
- What is the process from which these inequalities result, i.e. which specific features of surveillance procedures are crucial for social sorting?

These questions will be addressed in three steps. Firstly, we will briefly outline the way that social sorting, i.e. the institutional creation of different groups of people for the purposes of unequal treatment, has been practiced in the past. After that, we will focus on new forms of categorisation, which, in certain contexts and in various ways, create and monitor specific groups of persons that may not have existed before. The focus will be less on how the distribution of goods and rights is affected (as that would merely be the specific difference caused by the use of new vs. old surveillance technologies).[74] Rather, the focus will be on the abstract principles which differentiate new social sorting phenomena from classic ways of creating social inequality.[75]

Categorisation and sorting

As mentioned in the introduction, institutional sorting and categorisation of individuals is a key feature of modern societies. The distinction between nationals and foreigners, between men and women, between the employed and the unemployed are but three main distinctions, from which further differentiations emerge, and which may help create both social order as well as social lines of conflict. The main feature of these categorisation attempts is their focus on tangible real-world criteria (place of birth, gender, employment) which are relevant, if not identity-establishing, to those being categorised and form part of their self-image.[76] Even though many formal details of these (usually official) distinctions and their consequences may remain unknown, the basic pattern of distinction as well as the fact that such distinctions are made, are *transparent* in a certain way. The citizen is involved inasmuch as being able to reconstruct the data and having to actively provide it. The distinction of unequal groups by the rulers, i.e. the national state, is made mainly by means of administrative registration and statistical evaluation. This two-step (quantitative) surveillance system has, at least to some

[74] Unequal treatment extends from the provision of different information (advertisement, news) to infrastructural matters of water supply, road use, quality of internet connection etc. See Turow, J., *The Daily You: How the New Advertising Industry Is Defining Your Identity and Your Worth*, Yale University Press, 2011, and Lyon, D.: *Surveillance Studies. An overview*, Cambridge: Polity Press, 2007: 95.

[75] This means more than the technological aspects, for example the fact that digital surveillance does no longer require the local co-presence of those that monitor and those that are monitored and has made restrictions of time obsolete (Graham, S. and Murakami Wood, D. *"Digitizing Surveillance: Categorization, Space, Inequality,*" in Critical Social Policy 2003 (23): 227-248: 228).

[76] Gandy writes of "protected traits", including age, sexual orientation etc., which are illegal to use as a basis for discriminatory decisions, in Gandy, Jr, O.J. *"Statistical Surveillance: Remote Sensing in the digital Age*," in Ball, K., Haggerty, K.D., and Lyon, D.: Routledge *Handbook of Surveillance Studies*, London/New York: Routledge 2012, pp. 125-132: 127. Jenkins highlights the duality of identity-establishing features – they not only shape how we perceive ourselves but also how others perceive us; in: Jenkins, R.: *Identity, surveillance and modernity. Sorting out who's who*, in Ball, K., Haggerty, K.D., and Lyon, D.: Routledge *Handbook of Surveillance Studies*, London/New York: Routledge, pp.159-166: 161.

extent, a veneer of a "shared" evaluation, mutual in content and above one-sided bias. The results gathered appear in societal discourse only as figures and quotas of "official statistics", surrounded by an "aura of factuality" (Fischer 2009) which makes it hard, if not impossible, to object to the dominant viewpoint.

Bad objects, bad actions, bad persons

The writings of Gandy[77] and Lyon[78] still define the discourse on social sorting effects as a result of surveillance technologies which extend beyond official statistics. Both papers aim to highlight and connect numerous seemingly unconnected phenomena[79] in which persons are grouped and treated unequally through (primarily technological) surveillance. In trying to describe what is characteristic of modern phenomena of social sorting, three features are especially important: *bad objects*, *bad actions* and *bad persons*.

Lianos[80] (as referred to previously), discusses the use of anti-theft devices on merchandise, which are now common practice, as an example of new surveillance technologies. No longer do prejudiced opinions about suspicious persons[81] form the basis for surveillance by the store owner or store detective and no longer are members of certain groups of persons the only ones likely to be searched when leaving the store. Instead, the focus of surveillance technology shifts towards the action: it does not matter who takes an item of clothing from the store without having the anti-theft tag removed as the surveillance technology will only register the unremoved tag itself as culpable. It could be said that in this case the focus shifts from the "bad person" to the "bad action".[82] As such, surveillance in this case seems to act as a leveller.[83]

An opposing trend is evident in airport security[84], where the newest technologies are no longer aimed at preventing weapons (or weapons-grade devices) from being taken aboard aircraft. Rather, using (statistical) profiling techniques or physical behavioural pattern recognition (biometric identification, body scanners), certain persons are checked more or less thoroughly (passenger differentiation). The use of surveillance technologies in airports, especially the latest development of body scanners, combines issues about privacy concerns as well as about a reinforcement of social inequality. In the beginning, the use of body scanners raised concerns on a medical level (radiation hazards), but this is no longer an issue due to contemporary technical standards. However, the issue of privacy has probably reached its climax with body scanners being able to deliver pictures that show the passengers naked. These questions of intimacy even, as well as privacy, has moreover challenged ethics

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[77] Gandy,Jr, O.J. The panoptic sort. A Political Economy of Personal Information. Westview Press Inc 1993.

[78] Lyon, David, Surveillance as Social Sorting. Privacy, Risk and Automated Discrimination, Routledge Chapman & Hall, London, 2003

[79] This is, however, already an important observation: surveillance practices today are so much "'designed in' to the flows of everyday live" that it is difficult to view them in isolation; see Lyon, David: "Everyday surveillance. Personal data and social classifications," in: Information, Communication & Society 2002 5 (2), pp. 242–257: 242

[80] Lianos, Michalis, Social Control after Foucault, *Surveillance & Society* 2003 1(3), pp 412-430.

[81] see "categorical suspicion" in Marx, Gary T., Undercover: Police Surveillance in America,: University of California Press, Berkeley, 1988.

[82] The same is true for road traffic control, where speed checks are not carried out for certain cars only.

[83] It should, however, be noted that institutional learning processes take place in this area. In the long term, this can lead to redundance, with surveillance increasingly focusing on places where rules are broken. In such a case, structural discrimination interferes with the situational levelling practice; see Marx, Gary T.,: ''*Seeing Hazily, But Not Darkly, Through the Lens: Some Recent Empirical Studies of Surveillance Technologies''*, Law and Social Inquiry 30 (2), pp. 339-399: 354.

[84] see the report: http://www.ausbt.com.au/iata-s-airport-security-checkpoint-of-the-future-gains-traction

commissions to discuss how far, for example, the integrity of people with prostheses is secured in case of being exposed in a body scanner.[85] Body scanners, or airport surveillance technologies in general, possess inherent discriminating potential, and can cause trouble for the „usual suspects“: Lyon speaks of a new form of category of suspicion: „flying while arab“[86], while the benefits are going to selected, already privileged parts of the population.

This is obviously another case of a shift in focus, away from "bad objects" to "bad persons" that in turn are meant to be identified especially through "critical actions". While in the first case, surveillance technologies level out social inequalities (through abstraction of cultural real-world prejudices), these inequalities are radically reinforced in the second example because the categorisation of a person as somebody who requires enhanced screening is not clear to the individual but is merely implemented in the background.[87] This categorisation is nontransparent and based on criteria that the individual usually does not perceive as being part of their identity (e.g. certain nervous behaviour, sharing the same name as somebody who is wanted by the police, certain travel patterns). A crucial difference to the above example is that surveillance at the gate is a result of categorisation based on many previous acts of surveillance. It is basically an untraceable effect of a "surveillance assemblage".[88] Given the often diffuse but increasingly extensive production and surveillance of data without specific cause,[89] more and more criteria can be established and used to categorise individuals while becoming increasingly less transparent: "Indeed, individuals may never know the names, or even the existence of the groups to which they have been assigned."[90] This creates a general suspicion upon all passengers, but also leads specifically to discrimination against certain groups in society.[91] In the case of airport security, such procedures are legitimised by an alleged overall acceleration of security checks at the airport. This has precarious ethical consequences, however, as advantages for a certain class of citizens are obtained to the detriment of those groups that are discriminated against.

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[85] Ammicht Quinn, Regina, Benjamin Rampp and Andreas Wolkenstein, “An Ethics of Body Scanners: Requirements and Future Challenges from an Ethical Point of View“, in David A. Wikner, Arttu R. Luukanen (eds.), *Passive Millimeter Wave Imagining Technology* XIV. SPIE Proceedings, Volume 8022-8024.

[86] Lyon, David, *Surveillance Society: Monitoring Everyday Life*, Buckingham: Open University Press, 2003, p.99

[87] At the "Checkpoint of the Future" (http://www.ausbt.com.au/iata-s-airport-security-checkpoint-of-the-future-gains-traction), passengers will be directed towards one of three tunnels: normal screening for an undefined general public, less strict checks for frequent flyers and those generally considered beyond suspicion (children, the elderly, people who undergo an in-depth security check elsewhere) and finally in-depth screening procedures (causing not only invisible discrimination, but also delays).

[88] The meaning of the ‘surveillant assemblage’ has been illustrated above, in Para. 1.2.2

[89] See the concept of "dataveillance” in Clarke, Roger. “Information technology and dataveillance,” in Communications of the ACM, 1988, 31 (5) pp. 498 – 512.

[90] Gandy Jr., O.J. “*Statistical Surveillance: Remote Sensing in the digital Age*,” in Ball, K., Haggerty, K.D., and Lyon, D.: Routledge *Handbook of Surveillance Studies*, London/New York: Routledge 2012, pp. 125-132:126. Marx (2005: 353) especially criticises this artificiality of the groups created, seizing on a point that stands in the tradition of Foucault and was first made by Hacking I.: „*Making up people*,“ in Mario Biagioli: “*The Science Studies Reader”,* London/New York: Routledge, 1999, pp. 161-171.

[91] Ball/Wood have discussed this type of categorical vote of no confidence by the state against its people, in: Ball, K. and Murakami Wood, D. A Report on the Surveillance Society. For the Information Commissioner, by the Surveillance Studies Network, Summary Report, September 2006 p3. URL: http://www.privacyconference2006.co.uk/files/report_eng.pdf

A third example – this one from the area of CCTV surveillance – will address the issue of the objectivity of results, which was also raised in the interpretation of classic phenomena of inequality.

As the literature on the phenomenon of ‘‘social sorting’’ has shown extensively, surveillance technologies do not form a techno-idealistic ‘‘objective’’ lens to look at deviant behaviour. Rather they replicate prejudices: for example, simply by the decision about who is surveilled. Martin, Chatwin and Porteous describe a very crude example of this:[92] the focus of surveillance technologies on young people may lead to an ‘‘amplification of deviance’’[93] (a fear still shared by many criminologist researchers), but may also lead to various reactions from young people, which makes their life more dangerous. Whether they actively avoid surveillance or are being chased from places surveilled by CCTV, they will no longer enjoy the ‘‘security’’ supposedly rendered by the surveillance technologies. It is a well-reasoned fear that young people may experience surveillance as a completely unfair form of administrative intervention, producing security for the adult population, but raising their own chances of becoming a suspect or a victim.[94] A similar concern is expressed by McCahill, reflecting on the disproportionate targeting of ethnic minorities in the aftermath of 9/11 that can be observed in many western countries.[95] Here, the amplification-of-deviance thesis can be formulated as follows: ‘‘In terms of social impact, the disproportionate targeting of many innocent individuals because they fit the profile of 'terrorist', is likely to lead to further alienation as ideological 'fence sitters' begin to take sides and loose alliances become more cohesive groupings whose unwarranted targeting reinforces the view that they do not belong.’’[96]The practical, visible manifestation of formerly only subtle prejudices by means of surveillance technology may, in other words, produce what they were designed to abolish.[97]

While decisions by individuals, such as a police officer expressing suspicion, may be criticised as guided by prejudices, evidence produced by technology seems less disputable. This impression is based on the assumption that surveillance technologies are purely action-oriented. This way of looking at surveillance as a mere act of data/information gathering, however, is misleading. The location and number of cameras installed, the training of those responsible for evaluating the captured images and the algorithms used for software-based automatic reporting of suspicious activity are no less problematic than "ordinary" surveillance methods. Marx (2005: 354) quotes a study by McCahill[98] according to which the use of surveillance cameras in shopping centres in poorer areas is very much guided by generalised prejudices. In such cases the aim is not to prevent offences that typically occur in

[92] Martin, Denise, Caroline Chatwin and David Porteous: “Risky or at risk? Young people, surveillance and security“, *Criminal Justice Matters*, Vol. 68, No.1, 2007, pp. 27-28.
[93] Cohen, Stanley, *Folk Devils and Moral Panics*, Paladin, St Albans, 1973.

[94] This fear of an „exacerbation of problems, instead of their improvement“ due to surveillance efforts has also been expressed by young people in a study cited by Hilton and Mills: uncontrolled availability of sensitive personal data may worsen the problem of bullying in schools; see Hilton, Zoë, and Chris Mills, “Ask the children“, *Criminal Justice Matters*, Vol. 68, No. 1, 2007, pp. 16-17.
[95] McCahill, Michael, “Us and them – the social impact of ‘new surveillance’ technologies“, *Criminal Justice Matters*, Vol. 68, No. 1, 2007, pp. 14-15.
[96] McCahill, Michael, “Us and them – the social impact of ‘new surveillance’ technologies“, *Criminal Justice Matters*, Vol. 68, No. 1, 2007, p.15.

[97] See also: Spalek, Basia, and Bob Lambert: “Muslim communities under surveillance“, *Criminal Justice Matters*, Vol. 68, No. 1, 2007, p. 12.
[98] McCahill, Mike,: *The Surveillance Web*. Devon: Willan Publishing, 2002.

shopping centres but to monitor "24 hours a day problems" (ibid: 355). Consequently, knowledge of the locale and its inhabitants are important (ibid.). The last step in the development of this form of surveillance is the automation and programming of this knowledge or certain presumed behaviour and action patterns with the aim of enabling software-based evaluation of the images: smart surveillance.[99] While empirical clarification of the criteria of software-based evaluation may be difficult in a given case as such software is rarely open-source, there are many indicators that, just as in evaluation staff training, "classic" prejudices against certain groups of persons, action patterns or objects take effect, albeit in a refined form.[100]

Together, the three examples of new phenomena of social sorting illustrate how surveillance oscillates between objects and persons while at the same time focusing more strongly on actions. On the one side, there is surveillance of the present, focused on dangerous actions and objects, which is backed by great public support. At the same time, however, a far less specific and increasingly relevant body of knowledge is being gathered, yet not with the aim to ban dangerous objects. Instead, the aim is to delineate between groups of people deemed potentially more or less dangerous and thus requiring more or less surveillance while their identification and treatment are subject to criteria that are increasingly derived from momentary behaviour. As such these criteria have only limited relation to the self-image of these groups and are thus nontransparent. Furthermore they are often indicative of culturally ingrained or recent political prejudices.

1.3.4 Surveillance and social exclusion

The most intriguing feature of surveillance is that it always has some ambiguity in its effects considering that it relates both to care (look after) and control (looking over).[101] Surveillance implies control 'by default' and the focused and systematic gaze of surveillance as control opens up people to examination and scrutiny while interfering with individual autonomy.[102] As explained in the previous paragraph, social sorting aims to cluster populations 'in order to single out different groups for different kinds of treatment'.[103] Surveillance is always hinged to some specific purposes[104] and when it relates to control its main proposes are to sort out and single out individuals.

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[99] see Klang, Mathias, "Privacy, surveillance and identity," in Klang, M. and Murray, A.: Human Rights in the Digital Age, Routledge/Cavendish 2005, pp.175-190. See also EU-Project SMART.

[100] Kroener and Neyland caution against the assumption "that surveillance camera footage simply speaks for itself. […] Instead, the sensibility advocates getting close to the action to figure out how surveillance camera footage is narrated, and by whom, in what kinds of demonstrations it is used, to what ends, and drawing on what further support mechanisms", (Kroener, I. and Neyland, D. "*New technologies, securities and modernity*," in: Ball, K., Haggerty, K.D., and Lyon, D.: Routledge *Handbook of Surveillance Studies*, London/New York: Routledge 2012, pp. 141-148: 146.

[101] Lyon, David, *The Electronic Eye. The Rise of Surveillance Society*, Cambridge, Cambridge Polity Press, 1994.

[102] Monahan, Torin, "Surveillance as Governance. Social Inequality and the Pursuit of Democratic Surveillance", in Haggerty, Kevin D. and Minas Samatas, *Surveillance and Democracy*, New York, Routledge-Cavendish Publishing, 2010, pp. 91- 110, p. 91.

[103] Lyon, David, *Surveillance Studies, An Overview*, Cambridge, Cambridge Polity Press, 2007, p. 98.

[104] Lyon, David, *Surveillance Studies, An Overview*, supra note 38, p. 15.

Surveillance pretends to be neutral because of its horizontal gaze which can capture whatever control systems encounter indistinctively. Theoretically speaking, its potential use could result in neutral applications and consequences, given that surveillance affects both people who are directly and consciously subject to surveillance and those who are not. However, the so-called 'democratic potential' of surveillance gives only the illusion of being surveilled by a fair and impartial gaze. Actually, the supposed democratic potential of surveillance does not entail that all persons and settings have an equivalent chance of being surveilled.[105] Still, surveillance exercises differential forms of control to select individuals and discern differences among populations. Within surveillance societies individuals are subject to targeted and differential forms of surveillance according to their assigned social and/or economic status and surveillance practices have the purpose to mark out these differences.

As a consequence, surveillance as social sorting emphasises social inequalities while identifying and differentiating individuals. Indeed, social sorting is also referred to as a 'mechanism of societal differentiation'.[106] However, the potential of social sorting does not lie only in its capability of identifying, classifying and differentiating. Actually, social sorting is an active and positive process which itself constructs societal differences. Although surveillance is a common practice which affects society as a whole, it is always targeted and concerns individuals to a different extent. Given its discriminating character, surveillance as social sorting entails an unequal exposure to surveillance systems.[107] The disproportionate application of surveillance measures creates itself conditions of social marginality and enhances social discrimination of individuals on the basis of their social and/or economic address. Thus, 'marginalising surveillance'[108] operates by excluding individuals actively and can be considered as the most invisible outcome of surveillance as social sorting. It leads to differential applications of different surveillance systems for different populations on the basis of their given social and economic profile. Marginalising surveillance, in turn, paves the way for social exclusion. The differential deployment of surveillance systems causes marginalising and excluding effects which tend to discriminate particularly the poor, ethnic minorities and women. They tend to encourage existing socio-spatial inequalities while resulting in a higher sense of injustice.[109] Indeed, surveillance as social sorting is considered as a 'powerful means of creating and reinforcing long-term social differences'.[110] In other

[105] Marx, Gary T., "Seeing Hazily (but not Darkly) Through the Lens: Some Recent Empirical Studies of Surveillance Technologies", *Law & Social Enquiry*, Vol. 30, No. 2, Spring, 2005, pp. 339-399, p. 382.

[106] Monahan, Torin, "Surveillance as Governance. Social Inequality and the Pursuit of Democratic Surveillance", supra note 37, p. 97.

[107] For instance, as Norris and Armstrong reported, black young men who are casually dressed have a higher chance of being the target of surveillance in our societies. Norris, Clive and Armstrong Gary, *The Maximum Surveillance Society. The Rise of CCTV*, Oxford, Berg, 1999, pp. 108-116.

[108] Monahan, Torin, "Editorial: Surveillance and Inequality" (eds. Torin Monahan and Jill Fisher), *Surveillance & Society*, Vol. 5, No. 3, 2008, pp. 217-226, p. 220.

[109] The marginalising and excluding features of surveillance are reflected in many of the urban securitisation projects implemented in developing countries such as Brazil. See for example Kanashiro Mourão, Marta, "Surveillance Cameras in Brazil: Exclusion, Mobility, Regulation, and the New Meanings of Security", *Surveillance & Society*, Vol. 5, No. 3, 2008, pp. 270-289. Melgaço, Lucas, "The Injustices of Urban Securization in the Brazilian city of Campinas", *Spatial Justice* 5, 2001, available at http://jssj.org/media/dossier_focus_vt7.pdf (last accessed 30 September 2012).

[110] Lyon, David, *Surveillance as Social Sorting. Privacy, Risk, and Digital Discrimination*, New York, Routledge, 2003.

words, surveillance is capable of creating social identities that produce dynamics of 'social fragmentation', so contributing to social stratification.[111]

While social sorting results in a differential application of surveillance technologies and measures, it is also important to stress that individuals tend to implement and develop differential forms of acceptance of surveillance. Differential responses to the application of surveillance practices depend upon several variables which are usually linked to the personal social and economic status of the surveillance target. Indeed, from the point of view of the surveillant, surveillance is meant as a power that is exercised through differential forms and degrees. Nonetheless, there are 'varieties of overt and covert responses to surveillance both within a given form and across forms of surveillance'[112] which result in differential degrees of acceptance and resistance to surveillance. These different attitudes are usually associated with conditions of ignorance, manipulation, deception or seduction[113] which vary across peoples, places and times.

As argued above, surveillance systems tend to amplify existing social inequalities while reproducing conditions of social discrimination and marginalisation.[114] Surveillance as social sorting provides the grounds of discrimination[115] and reinforces social and economic inequalities. As a consequence, it questions the supposed democratic potential of surveillance and represents a potential threat to democracy and the constitutional state. Legislative and regulatory instruments can help mitigate its disturbingly antidemocratic character.[116] The following section will address this issue focusing particularly on the case of profiling.

1.3.5 Surveillance and profiling

Social exclusion and profiling can be considered as two of the faces of surveillance. From a theoretical point of view, profiling creates, discovers and constructs 'knowledge from huge sets of data'[117] using technologies operated by the use of algorithms and other similar techniques. From an operational perspective, profiling is the process of 'discovering correlations between data in databases that can be used to identify and represent a subject and/or the application of profiles to individuate and represent a subject or to identify a subject as a member of a group or category'.[118] The ultimate goal of profiling is to assess whether and to what extent the risks and/or opportunities concerning the individual subject affect or

[111] Lianos, Michalis, "Social Control after Foucault", *Surveillance & Society*, Vol. 1, No. 3, 2003, p. 415, pp. 412-430.
[112] Marx, Gary T., "Seeing Hazily (but not Darkly) Through the Lens: Some Recent Empirical Studies of Surveillance Technologies", supra note 40, p. 377.
[113] Marx, Gary T., "Seeing Hazily (but not Darkly) Through the Lens: Some Recent Empirical Studies of Surveillance Technologies", supra note 40, p. 342.
[114] Monahan, Torin, "Editorial: Surveillance and Inequality", supra note 43.
[115] Lyon, David, *Surveillance Studies. An Overview*, supra note 38, p. 101.
[116] As Monahan argues, 'The dominant manifestations of surveillance-based control today are disturbingly antidemocratic because of the way they sort populations unequally, produce conditions and identities of marginality, impinge upon the life chances of marginalized populations, and normalize and fortify neoliberal word orders'. Monahan, Torin, "Surveillance as Governance. Social Inequality and the Pursuit of Democratic Surveillance", supra note 37, p. 100.
[117] Hildebrandt, Mireille "Defining Profiling: A New Type of Knowledge?", in Hildebrandt Mireille, Serge Gutwirth (eds.), *Profiling the European Citizen, Cross-Disciplinary Perspectives*, Springer, 2008, pp. 17-45, p. 17.
[118] Hildebrandt, Mireille "Defining Profiling: A New Type of Knowledge?", supra note 52, p. 19.

can benefit the data controller. Profiling practices rely on a set of given predictions and their aim is to get knowledge deriving from the application of surveillance measures. Profiling provides the knowledge needed to implement dynamics of social exclusion through the use and processing of data. Data supply inputs to profiling, whereas knowledge represents the output of this process. Social exclusion develops along given social and/or economic patterns and the construction of profiles contributes to create such patterns which can confirm or deny existing preconditions.

The discriminating effects that result from social exclusion are reproduced and emphasised by the processing of profiles. As argued in the previous paragraph, social exclusion is at odds with the principle of equality and so tends to undermine fundamental democratic principles. Although it is not so evident that profiling threatens democracy, it is even harder to prove that profiling can foster democracy, especially when legislation does not provide proper legal safeguards to avoid the discriminating and excluding effects of profiling. From a material perspective, the legal framework that applies to profiling is unclear and fragmented. The European Data Protection Directive[119] does not contain any article or provision referring explicitly to profiling. Art. 15 of the Directive sets limits to the automated processing of personal data which is intended to evaluate personal aspects of the individual, such as performance at work, creditworthiness, reliability and conduct.[120] As Bygrave pointed out, for art. 15 to apply, four cumulative conditions must be satisfied, namely that 'a decision must be made' (1); 'the decision concerned must have legal or otherwise significant effects on the person whom the decision targets' (2); 'the decision must be based solely on automated data processing' (3); 'the data processed must be intended to evaluate certain personal aspects of the person who is targeted by the decision' (4).[121] However, the Directive does not clarify what is required for a decision to be made, when do decisions *significantly affect* data subjects, in which case a decision is based *solely* on automated data processing and if and to what extent the exemplifications of art. 15 (performance at work, creditworthiness, reliability, conduct) may include other *personal aspects*. In addition, it is apparent that the provision of art. 15 is neither meant to affirm the individual's right not to be subject to automated profiling, nor to set a direct prohibition of such practices. Rather, it is mainly aimed to provide member states with a legal safeguard against the automated profiling of their citizens' personal data.[122] As a consequence, art. 15 of the Directive applies if and to what extent the data subject decides to exercise his right not to be subject to automated profiling and so on a case by case basis. Thus, the limited applicability of art. 15 and the many pitfalls resulting from its interpretation do not ensure adequate legal protection against the threats of automated profiling.

[119] Directive 95/46/EC of the European Parliament and of the Council of 24 October 1995 on the protection of individuals with regard to the processing of personal data and on the free movement of such data (O.J. L 281, 23.11.1995).

[120] Art. 15 of the Directive states that "[M]ember States shall grant the right to every person not to be subject to a decision which produces legal effects concerning him or significantly affects him and which is based solely on automated processing of data intended to evaluate certain personal aspects relating to him, such as his performance at work, creditworthiness, reliability, conduct, etc".

[121] Bygrave, Lee A., "Minding the Machine: Article 15 of the EC Data Protection Directive and Automated Profiling", *Computer Law & Security Report*, Vol. 17, 2001, pp. 17-24 , p. 19.

[122] Indeed, the purpose of art. 15 mirrors the general scope of the European Data Protection Directive which was intended to 'seek to ensure a high level of protection in the Community', see the Preamble of the Directive 95/46/EC, point (10).

As argued above, profiling can produce discriminating effects and consequences. From a legal perspective, discriminatory profiling practices contravene art. 14 of the European Convention on Human Rights (ECHR) and art. 1 of Protocol No. 12 to the ECHR.[123] When a discriminating practice is invoked, the claimant has to identify and prove the discrimination. Notably, as for profiling practices, individuals have to prove that they have been selected and discriminated against because of their specific characteristics of sex, colour, language, religion, political or other opinion, national or social origin, association with a national minority, property, birth or *other status*.[124] This proof is often problematic *per se*, especially in cases of indirect discrimination.[125] Moreover, the main issue that arises in assessing the discriminating effects of profiling is linked to the fact that it is operated through the use of algorithms whose proprietary rights are sometimes held by the owner of the profiling system. This circumstance contributes to make the burden of proof even heavier for the claimant.

The existing legal framework that regulates profiling is quite ambiguous and weak. Of course, the revision of the European Data protection Directive is considered as an opportunity to introduce a more detailed and effective set of norms to counter the discriminating effects of profiling.[126]

1.4 SURVEILLANCE AND THE (RE)CONSTRUCTION OF PERSONAL IDENTITY

The sociological framework for capturing 1) the concept of identity, and 2) key features pertaining to how surveillance shapes, constructs or reconstructs personal identity is particularly rich and reveals a constellation of historical, social, political and cultural

[123] Art. 14 ECHR, 'Prohibition of discrimination', states that '[T]he enjoyment of the rights and freedoms set forth in this Convention shall be secured without discrimination on any ground such as sex, race, colour, language, religion, political or other opinion, national or social origin, association with a national minority, property, birth or other status'. Similarly, art. 1 of Protocol No. 12, 'General prohibition of discrimination', says that '[T]he enjoyment of any right set forth by law shall be secured without discrimination on any ground such as sex, race, colour, language, religion, political or other opinion, national or social origin, association with a national minority, property, birth or other status'.

[124] Art. 14 ECHR and art. A of Protocol No. 12 ECHR, supra note, 23.

[125] Schreurs, Wim, Mireille Hildebrandt, Els Kindt, Michaël Vanfleteren, "*Cogitas, Ergo Sum*. The Role of Data Protection Law and Non-discrimination Law in Group Profiling in the Private Sector", in Hildebrandt Mireille, Serge Gutwirth (eds.), *Profiling the European Citizen, Cross-Disciplinary Perspectives*, Springer, 2008, pp. 241-270, p. 260-261.

[126] Art. 20 of the proposed European General Data Protection Regulation (*Measures based on profiling*) are dedicated to profiling. Although the Regulation recognises the individual right not to be subject to automated profiling, it does not clarify many of the doubts raised in relation to the interpretation of art. 15 of Directive 95/46/EC. According to art. 20, "Every natural person shall have the right not to be subject to a measure which produces legal effects concerning this natural person or significantly affects this natural person, and which is based solely on automated processing intended to evaluate certain personal aspects relating to this natural person or to analyse or predict in particular the natural person's performance at work, economic situation, location, health, personal preferences, reliability or behaviour". European Commission, *Proposal for a Regulation of the European Parliament and of the Council on the Protection of Individuals with Regard to the Processing of Personal Data and on the Free Movement of Such Data (General Data Protection Regulation)*, Brussels, 25 January 2012, COM (2012) 11 final.

dimensions. In contemporary "surveillance societies"[127] identity and surveillance practices are, in fact, intertwined as ways of constructing, checking, monitoring and governing personal and social identities are also shaped by surveillance. Emerging discourses on identity are bound-up with surveillance-related topics.[128]

Before exploring predominant areas of concern pertaining to surveillance and identity, we first need a working definition of the concept. Contemporary theorists agree on the unfixed nature of identity which is considered more a process than a settled matter.[129] Jenkins argues that identity "is our understanding of who we are and who are other people."[130]Identity, in his words, is a matter of knowing "who's who" and involves a process of identification. In his view "identification is a dialectal interplay between internal self-identification – which can be individual or collective - and external categorisation by others.[131] The open-ended process of identity is also pointed out by Bauman[132] who emphasises the liquidity of identity, reinforcing the notion of malleability previously analysed by Foucault.[133]Historically, the changes brought about by modernity contributed to shape new notions of identity.[134] Paradoxically, the emancipatory aspects of modernity (i.e. political and social rights) went hand in hand with constraints and obligations for citizens, one of them being the verification of identity documentation.[135]

The unsettled relationship between surveillance and democracy pertaining to identity and identification (1) is, in fact, one of the predominant areas of concern among surveillance studies scholars. The shifts that occurred in the twentieth century, in particular increased computerisation, also drew attention to a second area, namely the ways in which security and surveillance systems construct and reconstruct identities (2) within visibility regimes. Another key theme that seems to emerge is the issue of digital selves.

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[127] Surveillance Studies Network, *A Report on the Surveillance Society*, 2006, http://www.ico.gov.uk/upload/documents/library/data_protection/practical_application/surveillance_society_full_report_2006.pdf

[128] *Inter alia:* Giddens, Anthony, *The Consequences of Modernity*, Polity Pr., Cambridge, 1990; Haggerty, Kevin D., and Richard V. Ericson (eds.), *The New Politics of Surveillance and Visibility*, University of Toronto Press, Toronto, 2006; Bennett, Colin J., and David Lyon (eds.), *Playing the Identity Card*, Routledge, New York, 2008; Kerr, Ian, Carole Lucock and Valerie Steeves (eds.), *Lessons from the Identity Trail: Anonymity, Privacy and Identity in a Networked Society*, Oxford University Press, 2009; Barnard-Wills, David, *Surveillance and Identity: Discourse, Subjectivity and the State*, Ashgate, Furnham and Burlington, 2012.

[129] Not only has identity an unfixed nature, but it is, culturally, an unfixed concept. The "Western" notion of identity, for instance, differs from "Eastern approaches" in which personal identity is conceived more within notions of, *inter alia*, no-self, than within notions of identifications. This contribution frames the understanding of the (re) construction of identity in surveillance societies through cultural and historical "Western" lens notwithstanding the relevance of less identity- centric approaches.

[130] Jenkins, Richard, *Social Identity*, Routledge, New York, 2004.

[131] Jenkins, Richard, "Identity, Surveillance and Modernity: sorting out who's who" in Ball, Kirstie, Kevin D. Haggerty and David Lyon (eds.), *Routledge Handbook of Surveillance Studies*, Routledge, 2012, p. 159.

[132] Bauman, Zygmunt, Liquid Modernity, Polity Press, Cambridge, 2000.

[133] Foucault, Michel, *Discipline and Punish: The Birth of the Prison*, Penguin, Harmondsworth, 1976.

[134] Giddens, Anthony, *The Consequences of Modernity*, Polity Pr., Cambridge, 1990; Caplan, Jane, and John Torpey (eds.), *Documenting Individual Identity*, Princeton University Press, Princeton, 2001; Cole, Simon A., *Suspect Identities: A History of Fingerprinting and Criminal Identification*, Harvard University Press, Cambridge MA,2001.

[135] Abercrombie, Nicholas, S. Hill and Brian Turner, *Sovereign Individuals of Capitalism*, Allen and Unwin, London, 1986; Caplan, Jane and John Torpey (eds.), *Documenting Individual Identity*, Princeton University Press, Princeton, 2001.

In the following pages we will draw attention to the aforementioned dimensions through the lens of the complex process of identity.

1.4.1 Identity and identification

Identity and identification are "different sides of the same coin", as Jenkins puts it.[136] However, while identity has a more voluntaristic nature as such, identification may or may not be connected with a sense of identity[137] and evokes (and may involve) categorisation from outside.[138] Identification relates to the way in which social agents are identified by third parties (i.e. the nation state or organisations). Establishing the truth of someone's identity[139] is a matter of knowing "what kind of person is this".[140] However, knowing is never neutral and thus this process bears consequences both to the *identifier*[141] and to the *identified.*[142]

Within identification processes, identity is actively constructed[143] and/or re-constructed and when, as Marx claims, increasing number of categories are put together "the individual may be uniquely (or almost) identified through a *composite identity".*[144] Anonymity, privacy and stigmatisation are strongly challenged here as negotiations are not always achievable. The tensions between identity, identification and the growing role of surveillance practices clearly emerge when looking at the development of state practices in documenting individual identity.[145] The exploration of the history of identification reveals, in fact, both inclusionary and exclusionary features of identity documentation and highlights important shifts, such as the move from self-identification to direct checking by third-party organisations through technologies (from data matching to biometrics) in order to confirm identities.[146] In doing so, either a reductive approach to identity or the construction of new identities may arise. As highlighted by Lyon, bits of information (i.e. biological features) are "abstracted from the person". In this framework, what comes into play is the concept of data double,[147] whose life story or narrative gets completely lost in favour of an over-determinist approach to the self.[148] The latter is thus reduced to biological features and the unfixed notion of identity becomes more static and disconnected (or disembodied) from the agent.

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[136] Jenkins, Richard, *Social Identity*, Routledge, New York, p. 85, 2004.
[137] Raab, Charles, "Perspectives on "personal identity", *BT Technology Journal*, Vol. 23, 4, 2005, pp. 15-24; Lyon, David, *Surveillance Studies. An Overview*, Polity Press, Cambridge, 2007.
[138] Jenkins, Richard, "Identity, Surveillance and Modernity: sorting out who's who" in Ball, Kristie. Kevin D. Haggerty and David Lyon (eds.), *Routledge Handbook of Surveillance Studies*, Routledge International Handbook, 2012, p. 192.
[139] Raab, Charles, "Perspectives on "personal identity", *BT Technology Journal*, Vol. 23, 4, 2005, pp. 15-24.
[140] Caplan, Jane and John Torpey (eds.), *Documenting Individual Identity*, Princeton University Press, Princeton, 2001, p.3.
[141] Jenkins, Richard, Identity, "Surveillance and Modernity: sorting out who's who" in Ball, Kristie. Kevin Haggerty and David Lyon (eds.), *Routledge Handbook of Surveillance Studies*, Routledge International Handbook, 2012, pp. 191-198.
[142] Lyon, David (eds.), *Theorizing Surveillance*, Willan Publishing, 2006.
[143] Barnard-Wills, David, *Surveillance and Identity: Discourse, Subjectivity and the State*, Ashgate, 2012.
[144] Marx, Gary, "Varieties of Personal Information as Influences on Attitudes Towards Surveillance" in Haggerty, Kevin D., Richard V. Ericson (eds.), *The New Politics of Surveillance and Visibility*, University of Toronto Press, Toronto, 2006, p.103.
[145] Caplan, Jane, John Torpey (eds.), *Documenting Individual Identity*, Princeton University Press, Princeton, 2001.
[146] Lyon, David, "Under my skin: from identification paper to body surveillance" in Caplan, Jane and John Torpey (eds.), *Documenting Individual Identity*, Princeton University Press, Princeton, 2001, p. 297.
[147] Poster, Mark, *The Mode of Information*, University of Chicago Press, Chicago, 1990.
[148] Ogura, Toshimaru, "Electronic Government and Surveillance-Oriented Society", in Lyon, David (eds.), *Theorizing Surveillance*, Willan Publishing, Devon, 2006, pp. 270-295.

The gradual disembodiment of identity, due to its abstraction from the person, is also a feature of "surveillance identification regimes"[149] and the deconstruction of the complexity of personal identity is carried out through the use of body parts for identification. The surveillant assemblage[150] breaks down the body into a series of flows in order to capture relevant information, namely to make the body-identity more "readable". This involves the constitution of "an additional self"[151] that may transcend the actual individual". Transforming the body into pure information"[152] for several purposes, could lead to 1) a reduction of the identity to the body, 2) a reduction of the body to a password[153] and 3) a reduction of the complex nuances of personal identity to what is worth "looking at" in order to analyse, categorise, single out and monitor.

Airport security systems, cross checking through dispersed computer systems, biometrics, consumer cards etc. are ways of checking identity through identification which, as Monahan notices, constrain individual autonomy and are antithetical to democratic principles.[154] Opening identities up to the constant checking of "who's who" and "what kind of person" might also foster social sorting[155] and might lead to the rise of new forms of subjectivities via the introduction of categories that encourages new forms of self-identification.[156] Therefore, not only is identity constructed in a mosaic-like fashion but people are "made up"[157] for the convenience of third parties and not exclusively in the name of security. The exploitation of consumers' identity, for instance, challenges the notion of democratic governance through the commodification and selling of consumer's identities.[158]

Categorisation through identification of who is "inside" and who is "outside" a given system is reminiscent of anti-democratic forms of state surveillance where identities were rigidly monitored and governed.[159] While in democratic contexts there is space for negotiations and

[149] Lyon, David, "Under my skin: from identification paper to body surveillance" in Caplan, Jane and John Torpey (eds.), *Documenting Individual Identity*, Princeton University Press, Princeton, 2001, p. 307.
[150] Haggerty, Kevin D. and Richard V. Ericson, "The Surveillant Assemblage", *British Journal of Sociology,* Vol.52, No.4, December 2000, pp.605-622
[151] Poster, Mark, *The Mode of Information,* University of Chicago Press,Chicago, p. 97, 1990.
[152] Haggerty, Kevin D. and Richard V. Ericson, "The Surveillant Assemblage", *British Journal of Sociology,* Vol.52, No.4, December 2000, p.609.
[153] Lyon, David, "Under my skin: from identification paper to body surveillance" in Caplan, Jane and John Torpey (eds.), *Documenting Individual Identity*, Princeton University Press, Princeton, 2001, p. 297.
[154] Monahan, Torin, "Surveillance as governance: social inequality and the pursuit of democratic surveillance", in Haggerty, Kevin D., and Minas Samatas, *Surveillance and Democracy*, Routledge, New York, 2010, p. 91.
[155] See, *inter alia:* Lyon, David, *Surveillance as Social Sorting: Privacy, Risk and Digital Discrimination*, Routledge, New York, 2003; Lyon, David, S*urveillance Studies. An Overview*, Polity Press, Cambridge, 2007; Gandy Jr,, Oscar, H., *The Panoptic Sort: A Political Economy of Personal Information,* Westview, Boulder CO, 1993; Kevin D., Richard and V. Ericson (eds.), *The New Politics of Surveillance and Visibility*, University of Toronto Press, Toronto, 2006.
[156]Haggerty, Kevin D., and Richard V. Ericson (eds.), *The New Politics of Surveillance and Visibility*, University of Toronto Press, Toronto, p. 15, 2006.
[157] Hacking, Ian, "Making People Up*"* in Thomas C. Heller, Morton Sosna and David E. Wellebery (eds.), *Reconstructing Individualism: Autonomy, Individuality and the Self in Western Thought,* Stanford University Press, Stanford, 1986, pp. 222-236.
[158] Fuchs, Christian, "Critique of the political economy of Web 2.0 surveillance", in Fuchs, Christian, Kees Boersma, Anders Albrechtslund and Marisol Sandoval, (eds.), *Internet and Surveillance. The Challenges of Web 2.0 and Social Media*, Routledge, 2012, p.p. 31-70.
[159] Samatas, Minas, *Surveillance in Greece: from AntiCommunist to Consumers Surveillance,* Pella,New York, 2004; Fonio, Chiara, "Surveillance under Mussolini's Regime", *Surveillance and Society,* Vol 9, 1/2, 2011, pp. 80-92.
http://library.queensu.ca/ojs/index.php/surveillance-and society/article/view/mussolini/mussolini

for resistance, the non-reciprocal nature of visibility[160] and identity politics in contemporary surveillance societies prescribe and produce orders that tend to crystallise the fluidity of identity, challenging both anonymity and self determination. An over simplistic approach to identity clearly emerges when looking at how security and surveillance systems construct and re-construct personal identities.

1.4.2 Security, surveillance technologies and identities: regimes of visibility

Today, the production of social categories and identities is increasingly carried out through IT-mediated surveillance.[161] In spite of this being nothing new,[162] in the last decade, in the wake of terrorist attacks in the US and Europe, the "securitization of identity"[163] is almost considered banal to the point that technologies of surveillance and control often go unquestioned as far as their legitimacy and efficacy are concerned.[164] In a permanent state of exception,[165] the securitisation of identity, according to Rose, is a strategy of control that operates by securing obligatory access points for the exercise of citizenship.[166] Rose insists on the non-totalitarian nature of control in contemporary surveillance regimes, as the assemblages pertaining to the securitisation of identity are rhizomatic, rather than hierarchical and are network connected. Yet they either generate forms of exclusion or discrimination through a disproportionate attention to already marginalised or unwanted identities (from the poor to the non-consumer), or - as stated in the previous section - they establish new forms of identities.[167] Moreover, as discussed below, gendered identities and dynamics are also constantly reproduced in surveillance regimes.

Surveillance technologies play a major role in the production of identities. As socio-technical devices, technologies, as such, cannot construct or make up identities, however they increase opportunities to classify, monitor and cross-check identities. Sorting individuals and population, as argued by Lyon, has become virtual.[168] Moreover, new categories, according to Amoore, result from contemporary ways of governing identity through pre-emptive identification.[169] The securitisation of identity, according to Rose, can be seen as a solution in different areas, from policing to consumption.[170]

Contemporary policing, for instance, increasingly relies on pre-emptive identification. Intelligence-led policing is a pro-active approach that, through data mining, searches for potential terrorist suspects. While, this approach does not automatically categorise and sort

[160] Haggerty, Kevin D., and Minas Samatas, *Surveillance and Democracy*, Routledge, New York, p. 9, 2010.
[161] Van der Ploeg, Irma., "Biometrics and the body as information: normative issues of the socio-technical coding of the body" in Lyon, David., *Surveillance as Social Sorting: Privacy, Risk and Digital Discrimination*, Routledge, New York 2003, pp. 57-73.
[162] Rule, James B., *Private Lives, Public Surveillance*, Allen Lane, New York, 1973.
[163] Rose, Nikolas, Government and Control, *British Journal of Criminology*, Vol. 40, 2000, pp. 321-339.
[164] Bigo, Didier, "Security, exception, ban and surveillance" in Lyon, David (eds.), *Theorizing Surveillance*, Willan Publishing, Devon, 2006, pp. 46-68.
[165] Agamben, Giorgio, *State of Exception*, Chicago University Press, Chicago, 2005.
[166] Rose, Nikolas, Government and Control, *British Journal of Criminology*, Vol. 40, 2000, p. 327.
[167] Haggerty, Kevin D., and Richard V. Ericson (eds.), *The New Politics of Surveillance and Visibility*, University of Toronto Press, Toronto, 2006.
[168] Lyon, David, *Surveillance as Social Sorting: Privacy, Risk and Digital Discrimination*, Routledge, New York, 2003.
[169] Amoore, Louise, "Governing by Identity" in Bennett, Colin J., and David Lyon (eds.), *Playing the Identity Card*, Routledge, New York, 2008, pp. 21-36.
[170] Rose, Nikolas, Government and Control, *British Journal of Criminology*, Vol. 40, 2000, pp. 321-339.

people in a discriminatory way, it may lead to digital ethnic profiling.[171] Searching through sensitive data of millions of people, as happened in Germany in the aftermath of 9/11 on the basis of religion and ethnic origin is a form of discrimination (deemed unlawful by the German Constitutional Court) and it reveals an underlying pre-emptive approach to risk-assessment focused on specific monitoring of pre-constituted social groups. Hence, the identity of individuals or groups is pre-determined and pre-classified as "risky". The target of "suspecting communities" reconstructs the identity of social agents and might have an impact on their life chances.

More often than not, social sorting is based on categorical suspicion instead of behavioural suspicion. For example, a substantial international body of literature focused on CCTV has shown that the operators' main target is selected on the basis of categorical suspicion alone.[172] Identities are not only labelled and constructed even before the surveillance gaze inspects the horizon, but data may be stored for post hoc data analysis. This holds true for many surveillance systems, from ANPR to body scanners. Additionally, some systems, like ANPR, can make the virtual identity "visible to interested individuals or agencies through a user interface".[173] Some identities are thus more exposed to the "electronic eye"[174] in ways that are not always known by the "watched". For instance, finding oneself on a restriction blacklist for international travel without knowing why,[175] or the reliance on low-visibility technologies for collecting personal information (i.e. DNA information gathering). Time also plays an important role as surveilled identities, especially stored data doubles, are less likely to be forgotten. Once again, identity seems to loose its fluidity and the open-ended process of (re)construction occurs independently from the observed subject. Space is also another aspect to consider as identities, for instance in the case of biometrics databases, are (re) produced in an unusual space, namely in the space of "biometrics politics".[176] Within this database space of biometrics politics, identity is reduced to "a physical characteristic translated into a binary code".[177] Thus, identity is reproduced according to qualities of time (potentially forever) and space (the database space) that go beyond time-space as perceived by the individual.

Gender identities and gender dynamics are also reproduced through surveillance technologies. The gendered nature of surveillance becomes apparent, for instance, when considering surveillance cameras. Most surveillance cameras operators, as Koskela claims are

[171] Open Society *Institute, Ethnic Profiling in the European Union: Pervasive, Ineffective and Discriminatory*, 2009, http://www.soros.org/sites/default/files/profiling_20090526.pdf

[172] See, *inter alia*: Norris, Clive, and Gary Armstrong, *The Maximum Surveillance Society: The Rise of CCTV*. Oxford: Berg., 1999; Lomell, Heidi Mork, Targeting the Unwanted: Video Surveillance and Categorical Exclusion in Oslo, Norway, *Surveillance and Society*, Vol. 2 (2/3), 2004, pp. 346-360 http://www.surveillance-and-society.org/articles2(2)/unwanted.pdf; Dubbeld, Linsey, *The Regulation of the Observing Gaze: Privacy Implications of Camera Surveillanc*e, Netherlands Graduate Research School of Social Science, Technology and Modern Culture, University of Maastricht, 2004; Fonio, Chiara, The Silent Growth of Video Surveillance in Italy, *Information Polity*, Vol. 16, No. 4, 2011, pp. 379-388; Doyle, Aaron, Randy, Lippert and David Lyon, (eds.), *Eyes Everywhere. The Global Growth of Camera Surveillance*, Routledge, New York, 2012.

[173] Derby, Patrick, "Policing in the Age of Information: Automated plate number recognition" in Doyle, Aaron, Randy, Lippert and David Lyon, (eds.), *Eyes Everywhere. The Global Growth of Camera Surveillance*, Routledge, 2012, p. 158.

[174] Lyon, David, *The Electronic Eye: The Rise of Surveillance Society*, Polity Press, Cambdridge,1994.

[175] Koskela, Hille, "You shouldn't wear that body" - The problematic of surveillance and gender in Ball, Kristie., Kevin D. Haggerty and David Lyon (eds.), *Routledge Handbook of Surveillance Studies*, Routledge International Handbook, New York, 2012, pp. 49-56.

[176] Muller, Benjamin, J., "Borders, bodies and biometrics: towards identity management" in Zureik, Elia and Mark B. Salter (eds.). *Global Surveillance and Policing. Borders, Security, Identity*, Routledge, New York, 2011, p.93.

[177] *ibid.*

male and "people under surveillance are disproportionally female".[178] Moreover, gender power dynamics arise "in situations in which one has to prove her/his identity."[179] Transgender people, for example, do not fit into the two-gendered world and can find it difficult "to negotiate movement across international borders".[180] While in the first case, female identity may be over-sexualized or objectified due to the "masculinization of space"[181] empowered by surveillance technologies, the second case epitomises the binary notion of sexual identity embedded in these technologies.

Borders are significant non-places[182] where forms of identity politics clearly materialise. The individual border crosser is, in fact, tied to records on files thanks to systems which are usually fitted with biometrics.[183] In doing so, "unwanted" identities can be stopped and expelled. Borderline identities are fully transparent as being suspicious (illegal migrant) or desirable (wealthy travellers) and they are now inscribed on people's "now machine-readable bodies".[184] Hence, there are transparent-mobile identities who pass smoothly through electronic gates and transparent-less mobile identities whose freedom of movement could be restricted for security reasons. In both cases, surveillance technologies enable identification and reinforce forms of identity politics.

The aforementioned examples put emphasis on the visibility of identity. Visibility has become one the key dimensions of the politics of surveillance and identity which takes place in what Brighenti calls "visibility regimes".[185] The latter are constitutive as political regimes and strictly interwoven with technologies of power: "because of the interplay, the idea of retreat into the private domain as a means of avoiding surveillance is chimerical".[186] Brighenti also describes surveillance as "specific management of the relative visibilities and visibility asymmetries among people".[187]

Contemporary surveillance societies are surveillant visibility regimes, since visibility is inherently asymmetrical and unavoidable. Managing the visibility of people's identities and behaviours either for security purposes or to the advantage of third parties is a crucial feature of the politics of identity. Identities of citizens, consumers, travellers etc. are monitored and checked in order to make "visible the invisible", for example iris patterns in the case of biometrics, DNA, or patterns of consumption of which the consumer might not be aware. In Brighenti's words, surveillance agencies are not openly accountable in their practices "based

[178] Koskela, Hille, "You shouldn't wear that body" - The problematic of surveillance and gender in Ball, Kristie., Kevin D. Haggerty and David Lyon (eds.), *Routledge Handbook of Surveillance Studies,* Routledge, New York, 2012, p. 51.
[179] *Ibid.*
[180] ibid.
[181] Koskela, Hille, "Cam era:" The Contemporary Urban Panopticon", *Surveillance and Society,* Vol. 1 (3), 2003, pp. 292-313. http://www.surveillance-and-society.org/articles1(3)/camera.pdf
[182] Augé. Marc, *Non-Places: Introduction to an Anthropology of Supermodernity*, Verso Books, London, 1995.
[183] Van der Ploeg, Irma, "Borderlines Identities: The Enrolment of Bodies in the Technological Reconstruction of Borders" in Monahan, Torin., *Surveillance and Security. Technological Politics and Power in Everyday Life,* Routledge, New York, 2006, pp. 177-193.
[184] Van der Ploeg, Irma, "Borderlines Identities: The Enrolment of Bodies in the Technological Reconstruction of Borders" in Monahan, Torin., *Surveillance and Security. Technological Politics and Power in Everyday Life,* Routledge, New York, 2006, p. 179.
[185] Brighenti, Andrea, M., *Visibility in Social Theory and Social Research*, Palgrave MacMillan, 2010.
[186]Brighenti, Andrea, M., *Democracy and Its Visibilities*, 2008, http://eprints.biblio.unitn.it/1495/1/Brighenti_08_Democracy_and_Its_Visibilities-chapter.pdf.
[187] Brighenti, Andrea, M., "Democracy and its Visibilities" in Haggerty, Kevin D., and Minas Samatas, *Surveillance and Democracy,* Routledge, New York, 2010, p. 62.

as they are on professional *savoirs* who are themselves invisible".[188] The asymmetry also emerges in profiling criteria which are indeed invisible as opposed to visible and scrutinised identities. Notwithstanding that surveillance technologies are not monolithic, the impetus towards a maximum surveillance society[189] or a transparent society,[190] has led to visibility regimes in which the quest for transparency begins with the exposure of identity. Relevant "identities" to visibility regimes are both bits of information - such as biological indicators and traces - in order to "join the dots" and to pre-constitute and/or (re)construct identities.

Within this framework the right to *anonymity* is challenged. Despite the fact that both the meaning and the protection of anonymity is contextually situated.[191] It can be inferred that either the use of surveillance technologies in the public space or a preference in western countries for identification, have diminished the overall value of anonymity. This appears to be a global trend reflected in all jurisdictions as laws - more often than not - enable the deployment of surveillance technologies rather than the protection of anonymity.[192] However, Marx claims that there are environments where a degree of anonymity exists - if surveillance technologies are absent - such as crowded urban places or when people are less likely to be known, for instance being away from home as tourists.[193] If visibility regimes are embedded in democratic contexts, "anonymous identities", or individuals that cannot be easily identified, are less likely to be socially acceptable and legally protected. Haggerty and Ericson emphasise that the disappearance of anonymity or, as they put it, "the disappearance of the disappearance"[194] is part of an historical process. One of the major social and political shifts from pre-modernity living arrangements to modern urban life is, on the one hand, more opportunity for anonymity within large urban settings and on the other, efforts by the institutions to gain knowledge about the population though identification. This knowledge, they note, "is now manifest in discrete bits of information which break the individual down for purposes of management, profit and entertainment".[195] The progressive erosion of anonymity is an unavoidable aspect of the surveillant identity. However, as Lyon suggests, this does not mean that the "data subjects" cannot negotiate or resist the effects of the assemblage.[196] While anonymity seems impossible, negotiation or even awareness of the intensity of the electronic gaze may mitigate the impact on identity.

Besides being unavoidably exposed, individuals increasingly seek self-exposure via social network sites and blogs. The interactive realm is, according to Andrejevic, a digital enclosure

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[188] Brighenti, Andrea, M., "Democracy and its Visibilities" in Haggerty, Kevin D., and Minas Samatas, *Surveillance and Democracy*, Routledge, New York, 2010, p. 64.
[189] Norris, Clive, and Gary Armstrong, *The Maximum Surveillance Society: The Rise of CCTV*. Oxford: Berg., 1999.
[190] Brin, David, *The Transparent Society: Will Technology Force Us to Choose Between Privacy and Freedom?*, Basic Books, New York, 1999.
[191] Kerr, Ian, Carole Lucock and Valerie Steeves (eds.), *Lessons from the Identity Trail: Anonymity, Privacy and Identity in a Networked Society,* Oxford University Press, 2009, p. 438.
[192] Kerr, Ian, Carole Lucock and Valerie Steeves (eds.), *Lessons from the Identity Trail: Anonymity, Privacy and Identity in a Networked Society,* Oxford University Press, 2009.
[193] Marx, Gary, T., "Identity and Anonymity: Some Conceptual Distinctions and Issues for Research" in Caplan, Jane., and John Torpey (eds.), *Documenting Individual Identity,* Princeton University Press, Princeton, 2001, pp. 311- 327.
[194] Haggerty, Kevin D. and Richard V. Ericson, "The Surveillant Assemblage", *British Journal of Sociology,* Vol. 52, No. 4, December 2000, pp. 605-622.
[195] Haggerty, Kevin D. and Richard V. Ericson, "The Surveillant Assemblage", *British Journal of Sociology,* Vol. 52, No. 4, December 2000, p. 619.
[196] Lyon, David, *Surveillance Studies An Overview,* Polity Press, Cambridge, p. 15, 2007.

"wherein every action and transaction generates information about itself".[197] Along with regimes of visibility, the willingness to make self-identity virtually visible on the World Wide Web is apparent when looking at "digital natives".[198] As Turkle puts it, in fact, "the years of identity construction are recast in terms of profile production".[199] Identities, going digital, share the same characteristics of social networking sites which are, drawing on Boyd and Ellison[200]- persistent, searchable, replicable and "read" by an invisible audience. Digital identities are thus exposed to "dataveillance" on sites, like Facebook, where surveillance is valorised,[201] that is, turned into a profit. The commodification of users' data for profit[202] relates to yet another relevant aspect as far as identity and surveillance are concerned: the redefinition of one's identity. The commercialisation of virtual communities may lead to the disappearance of identity distinctions which get "lost in the conformity of the commodity".[203] Identities are redefined as consumers' identities despite differences among social and cultural groups.[204]

Possibilities of intersections between surveillance and the (re) construction of identity are numerous, *inter alia*, personalised surveillance[205] through data mining, namely surveillance of personal details for several purposes (from policing to marketing), lateral surveillance[206] or peer-to-peer monitoring, that is surveillance carried out by individuals rather than by institutions, empowering exhibitionism, the desire to be watched which entails an active self-construction of identity.[207] When looking at the Internet, identity construction through engagement in social networking sites - and therefore also through participatory surveillance - takes a less Orwellian-oriented narrative.[208] Lyon and Trottier, drawing on empirical research, capture the features of surveillance practices through the notion of social surveillance that offers insights on surveillance and on identity within Facebook.[209]

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[197] Andrejevic, Mark, "The Work of Watching One Another: Lateral Surveillance, Risk, and Governance", *Surveillance and Society,* Vol. 2 (4), 2005, p. 480. http://library.queensu.ca/ojs/index.php/surveillance-and-society/article/view/3359/3322

[198] Prenksy, Marc, "Digital Natives, Digital Immigrants", *On the Horizon,* Vol. 9, No. 5, 2001.

[199] Turkle, Sherry, *Alone Together. Why We Expect More Technology and Less from Each Other,* Basic Books, New York, p. 182, 2011.

[200] Boyd, Danah M., and Nicole B. Ellison, "Social Network Sites: Definition, History and Scholarship, *Journal of Computer-Mediated Communication,* Vol. 13, 2007, pp. 210-230.

[201] Cohen, Nicole, S., "The Valorization of Surveillance: Towards a Political Economy of Facebook", *Democratic Communiqué,* vol. 22, no. 1, Spring 2008.

[202] Fuchs, Christian, "Critique of the political econonomy of Web 2.0 surveillance", in Fuchs, Christian, Kees Boersma, Anders Albrechtslund and Marisol Sandoval, (eds.), *Internet and Surveillance. The Challenges of Web 2.0 and Social Media*, Routledge, New York, 2012, pp. 31-70.

[203] Hill, David, W., "Jean-Francois Lyotard and the Inhumanity of Internet Surveillance" in Fuchs, Christian, Kees Boersma, Anders Albrechtslund and Marisol Sandoval, (eds.), *Internet and Surveillance. The Challenges of Web 2.0 and Social Media*, Routledge, New York, 2012, p.119.

[204] Song, Felicia Wu, *Virtual Communities: Bowling Alone, Online Together,* Peter Lang Publishing, New York, 2009.

[205] Fuchs, Christian, Kees Boersma, Anders Albrechtslund and Marisol Sandoval, (eds.), *Internet and Surveillance. The Challenges of Web 2.0 and Social Media*, Routledge, New York, 2012.

[206] Andrejevic, Mark, "The Work of Watching One Another: Lateral Surveillance, Risk, and Governance", *Surveillance and Society,* Vol. 2 (4), 2005, pp. 479-497 http://library.queensu.ca/ojs/index.php/surveillance-and-society/article/view/3359/3322.

[207] Koskela, Hille, "Webcams, TV shows and mobile phones: Empowering Exhibitionism", *Surveillance and Society,* Vol 2, 2/3, 2004, pp. 199-215 http://www.surveillance-and-society.org/articles2(2)/webcams.pdf.

[208] Albrechtslund, Anders, "Online Social Networking as Participatory Surveillance", *First Monday,* Vol. 13 (3), 2008 http://firstmonday.org/article/view/2142/1949.

[209] Lyon, David and Daniel Trottier, "Key features of Social Media Surveillance" in Fuchs, Christian, Kees Boersma, Anders Albrechtslund and Marisol Sandoval, (eds.), *Internet and Surveillance. The Challenges of Web 2.0 and Social Media*, Routledge, 2012, pp. 89-104.

Collaborative identity construction, unique lateral surveillance opportunities, the visibility, measurability and searchability of ties, the "ever-changing interface and privacy controls alter users' visibility through the site" and potential re-contextualisation of social media content are five key surveillance features.[210] They all deal, to some extent, with the construction and reconstruction of personal and social identity in social media as they emphasise the opportunities (collaborative identity construction) and drawbacks (never forgotten identities and social ties and regimes of visibility) of social surveillance. Increasingly, identity construction takes place in virtual spaces where social surveillance plays a major role. More research is needed to understand the implication of this process on identity, visibility, perceptions of privacy and anonymity. For instance, visibility, previously analysed, is enriched not only by the exposure of one's identity but by the visibility of social ties.[211] Exposure, thus, extends far beyond a single individual. Also, in this context, identity theft and the de-territorialisation of personal details that can be scrutinised elsewhere or even sold to third parties, complicate the relationship between identity and social media even further.

As shown, the (re)construction of identity in contemporary surveillance societies is multifaceted and it is not limited to the areas analysed above. However, the dimensions of identity and identification, along with the role played by security and surveillance technologies within regimes of visibility in shaping (digital) identity, seem to offer insights on the interplay between surveillance practices and identity processes.

1.5 SURVEILLANCE AND CRIMINOLOGICAL APPROACHES THAT ADDRESS FEELINGS OF FEAR AND INSECURITY

The academic field of criminology has approached the study of surveillance, security, fear and insecurity in a number of different (and to some extent competing ways). A central broad distinction can be drawn between two different 'stances' regarding how surveillance and security have been approached. The first kind is associated with what could be termed 'scientific' criminology, which seeks to advise on how best to reduce or prevent crime (ranging from petty crime to acts of terrorism), aims to deliver greater security, and sees surveillance and security technologies and practices as one 'tool' among others to be employed to these ends. The second kind of approach is altogether more critical, offering sociologically-informed critiques of surveillance and security practices, drawing attention to social and political costs associated with their use, and often suggesting that such practices are best understood in terms of their role in wider systems of social and political 'control'. Within the first approach, fear and insecurity are taken to be reflective of genuine public concerns (for example, of the possibility of being a victim of crime); whereas for the second approach, fear and insecurity are often regarded with greater suspicion, being notions to which governments can appeal when introducing illiberal new surveillant practices, and are sentiments that may be fanned by the mass media or by political or commercial interests for self-serving purposes.

[210] Lyon, David and Daniel Trottier, "Key features of Social Media Surveillance" in Fuchs, Christian, Kees Boersma, Anders Albrechtslund and Marisol Sandoval, (eds.), *Internet and Surveillance. The Challenges of Web 2.0 and Social Media*, Routledge, 2012, p. 89.

[211] Lyon, David and Daniel Trottier, "Key features of Social Media Surveillance" in Fuchs, Christian, Kees Boersma, Anders Albrechtslund and Marisol Sandoval, (eds.), *Internet and Surveillance. The Challenges of Web 2.0 and Social Media*, Routledge, 2012, p. 98.

Within criminology (and in particular Anglo-American criminology), this first kind of approach to surveillance has traditionally been associated in particular with 'opportunity reduction' approaches to crime prevention including 'situational crime prevention'. Architectural history features numerous implementations of physical security measures, but in living memory it was with American architect Oscar Newman's 1972 book Defensible Space that a systematic attempt at analysing the failings of modernist residential accommodation blocks (such as high-rise buildings used for mass public housing projects) was offered, and in particular an explanation offered as to why they appeared to be the sites of various kinds of offending behaviour.[212] Newman argued that certain design features of such buildings and schemes had inadvertently corroded residents' sense of 'territoriality' over their immediate surrounding space (and willingness to intervene if necessary); and in part this was as a result of the building designs having reduced the operation of 'natural surveillance' (by which is meant the mutual everyday watching of residents by each other, including learning who was local and who was an outsider). In a discussion of a real example, Newman notes that where high-rise design was unavoidable, one way of increasing defensible space in what were the otherwise sometimes concealed and hence dangerous spaces in and around elevators was to install CCTV cameras there. Interestingly, he suggests that although these were monitored by guards their greater effectiveness derived from the fact that the monitor screens were also on public view to residents throughout the building.[213] Writing at almost the same time, American criminologist C. Ray Jeffery sought to determine techniques whereby crime in built spaces could be reduced through modifying the built environment and hence people's behaviour, an approach he termed 'Crime Prevention Through Environmental Design' (CPTED).[214]

In 1976, Brantingham and Faust proposed a new conceptual model of crime prevention, in which the various different methods prevalent at the time were separated into three kinds - the first of which, 'primary prevention', referred to those methods 'directed at criminogenic conditions in the physical and social environment at large', and hence is another name for what today is more commonly referred to as situational crime prevention.[215] A few years later, Cohen and Felson published a highly influential journal article proposing an explanation to a key problem facing criminology, namely why crime rates had risen in America (and indeed in many Western countries) in the post-war period.[216] Their explanation was that changes to people's everyday 'routine activities' brought about by wider social changes (such as more people spending more time away from their households, for work and leisure reasons) had generated more opportunities for crime. Dispensing, therefore, with any account based on criminals' supposed special characteristics, they argued instead that crime simply required three 'ingredients' to be co-present: '*likely offenders*, *suitable targets* and the *absence of capable guardians*'.[217] The last of these factors can be seen to relate to visual

[212] Newman, Oscar, *Defensible Space: Crime Prevention Through Urban Design*. New York, Macmillan, 1972.
[213] Newman, Oscar, *Defensible Space: Crime Prevention Through Urban Design*. New York, Macmillan, 1972.
[214] Jeffery, C. Ray, *Crime Prevention Through Environmental Design*. Beverly Hills, CA, Sage Publications, 1971.
[215] Brantingham, Paul J., and Frederic L. Faust, 'A conceptual model of crime prevention' *Crime and Delinquency* Vol. 22, pp. 284–296, 1976, at 284. (The other two types involve early social interventions in 'at risk' groups; and the rehabilitation of convicted offenders—they also saw a role for surveillance in the latter approach.)
[216] Cohen, Lawrence E. and Marcus Felson, 'Social Change and Crime Rate Trends: A Routine Activity Approach', *American Sociological Review*, Vol. 44, pp. 588-605, 1979.
[217] Cohen, Lawrence E. and Marcus Felson, 'Social Change and Crime Rate Trends: A Routine Activity Approach', *American Sociological Review*, Vol. 44, pp. 588-605, 1979, at p.588; emphasis in original.

surveillance, whether natural of technological, where this is associated with intervening in and hence disrupting the criminal act.

Again around the same time, the British criminologist Ron Clarke, then at the Home Office in London, was building upon much of the above work, and by 1980 had developed these ideas further into an approach he termed ‘‘situational’ crime prevention’, arguing that ‘crime might be most effectively prevented by reducing opportunities and increasing the risks’ to a criminal of being caught.[218] To achieve the latter, he wrote, ‘it may be necessary to employ people more suited to a surveillance role, train them better to carry it out, or even provide them with surveillance aids’ such as CCTV cameras.[219] That same year, Clarke contributed to what is essentially the first attempt at a typology of situational crime prevention measures, identifying 8 headings of which 3 mention surveillance (‘Formal surveillance’, ‘Natural surveillance’ and ‘Surveillance by employees’), among other kinds such as ‘target hardening’.[220] In the same volume of papers can be found a broadly positive evaluation of CCTV cameras introduced in four London Underground train stations in November 1975 (apparently in response to the moral panic about ‘mugging’[221] that had captured the British public’s attention and which according to Hall et al. peaked in 1972-3).[222] A few years later, Clarke identified surveillance as one of the three ‘main categories’ of situational intervention (the other two are design and ‘environmental management’).[223] By 1992, the 8 headings had expanded further to become ‘twelve techniques’, and perhaps to make them manageable, Clarke subsumed them under what are now three famous goal-based headings: ‘increase the effort’, ‘increase the risks’, and ‘reduce the reward’.[224]

While the SCP typology has further expanded since to include two further headings (‘remove excuses’ and ‘reduce provocations’),[225] the key point to note here is that within situational crime prevention, throughout this time ‘surveillance’ has remained a core proposed technique for reducing crime by increasing offenders’ perceived risks of detection. It is also important to note that the situational crime prevention approach does not simply refer to CCTV cameras. On the one hand, it has long recognised the importance of human surveillance, both of the ‘formal’ kind represented by police officers and security staff, and of the ‘informal’ kind found in citizens’ everyday watching of the places they go and of each other. On the other, insofar as surveillance measures are technological, and while CCTV cameras have to date been the obvious form of implementation of electronic surveillance, this is not

[218] Clarke, R.V.G., ‘‘Situational’ Crime Prevention: Theory and Practice’, *British Journal of Criminology*, Vol. 20, Issue 2, pp.136-147, 1980, at p.145.
[219] Clarke, R.V.G., ‘‘Situational’ Crime Prevention: Theory and Practice’, *British Journal of Criminology*, Vol. 20, Issue 2, pp.136-147, 1980, at p.143.
[220] Hough, J.M., R.V.G. Clarke and P. Mayhew, ‘Introduction’, in Clarke, R.V.G. and Patricia Mayhew (eds), *Designing out crime*. London, H.M.S.O., 1980, pp. 7-9.
[221] Burrows, John ‘Closed circuit television and crime on the London Underground’, in Clarke, R.V.G. and Patricia Mayhew (eds), *Designing out crime*. London, H.M.S.O., 1980.
[222] Hall, Stuart, Chas Critcher, Tony Jefferson, John Clarke and Brian Roberts, *Policing the Crisis: Mugging, the State, and Law and Order*, Macmillan, London and Basingstoke, 1978.
[223] Clarke, Ronald V., ‘Situational Crime Prevention: Its Theoretical Basis and Practical Scope’, in *Crime and Justice*, Vol. 4, pp. 225-256, 1983.
[224] Clarke, Ronald V. (ed), *Situational Crime Prevention: Successful Case Studies*, New York, Harrow and Heston Publishers, 1992, p.13.
[225] Cornish, Derek and Ronald V. Clarke, ‘Opportunities, Precipitators and Criminal Decisions’, in Martha J. Smith and Derek B. Cornish (eds) *Theory for Practice in Situational Crime Prevention*, Criminal Justice Press, Monsey, NJ, 2003, p. 90.

exclusively so, and there is no conceptual reason why additional surveillance technologies could not be so implemented in the future.

Indeed, other examples Clarke offers as forms of surveillance that aim at 'increasing perceived risks' include passenger and baggage screening (for example at airports through the use of metal detectors or more recently by full body scanners), and the use of merchandising tags (in wholesale or retail sales, as a means of reducing loss of inventory including via shoplifting). He further identifies burglar alarms as a means of 'formal surveillance', implying that conceptually these can be thought of as an automated form of security guard. Various road traffic technologies seem also to fall under this heading, including speed cameras, tachographs in commercial transport vehicles, and more recently the use of GPS car tracking systems that can detect not just vehicle speed, but also rate of acceleration and location.

Moving away from situational crime prevention *per se*, various other surveillance technologies have been employed within the context of crime control and criminal justice, some of which might also be described as 'security' technologies or as security technologies that can have a surveillant dimension. Various applications of surveillance cameras have been experimented with by police forces. Cameras recording video footage have long been used in police cars (the footage is generally used for evidential purposes rather than in the name of immediate crime prevention). Cameras mounted in police cars or installed by the side of a road have been used to automatically recognise passing car number (licence) plates ('ANPR') and by checking these against police records to flag up any of potential interest to police. The use of cameras in police helicopters also appears now commonplace. Trials have been conducted in some police forces in the UK with police helmet-mounted cameras, as a way of recording interactions with victims, suspects and witnesses, for possible subsequent use in investigations and prosecutions. Some police forces have experimented with the use of flying 'drones' equipped with remote surveillance cameras; despite practical problems experienced in at least one such trial, the use of airborne surveillance cameras for public order policing purposes seems increasingly technologically feasible. Lastly, there are various security practices at national borders that may be allied to surveillance systems. For example, border security practices may involve the use of physical barriers, CCTV systems, identification documents such as passports, and databases.[226]

Various practices that could be said to involve the 'surveillance' of electronic data have been implemented around the world in recent decades - a phenomenon that has been termed 'dataveillance'.[227] For example, governments may collect passenger flight information; mobile (cell) phone call records may be collected; or data passing through the Internet may be monitored (for example, by using 'deep packet inspection').[228] Since the acquisition and storage of data, especially where this is done on an automated or mass scale, by itself may not involve any sustained 'watching' of a given individual, it might be better characterised as a

[226] Adey, Peter, 'New regimes of border control' in Ball, Kirstie, Kevin Haggerty and David Lyon (eds) *Routledge Handbook of Surveillance Studies*, Routledge, Abingdon, 2012; see also Aas, Katja F., ''Crimmigrant' bodies and bona fide travellers: Surveillance, citizenship and global governance', *Theoretical Criminology*, Volume 15, Issue 3, 2011, pp. 331-346.

[227] Clarke, Roger, 'Information Technology and Dataveillance', *Communications of the ACM*, Volume 31, Issue 5, May 1988, pp. 498-512.

[228] Bendrath, Ralf and Milton Mueller, 'The end of the net as we know it?: Deep packet inspection and internet governance', *New Media & Society*, Volume 13, Issue 7, 2011, pp. 1142-1160.

'security' rather than 'surveillance' activity - though one could reasonably speak of such systematic data acquisition schemes themselves as being ones of 'surveillance' insofar as they are ongoing and sustained. Whereas the justification for carrying out such surveillance schemes may be national security or counter-terrorism, they could also be used for more everyday policing purposes; for example, deep packet inspection of Internet traffic could be used to detect the online sharing of copyright infringing media files.[229]

Within criminal justice one of the best-known forms of surveillance used in the context of punishment is in the electronic monitoring ('tagging') of offenders. The first generation of tags used in the 1980s (though still in wide usage today) had few surveillance capabilities beyond being able to monitor offender compliance with a home detention curfew order. (It should be noted that being 'tagged' is not formally the punishment; the tag is used to ensure compliance with the actual punishment, namely home curfew.) A second generation of tags, however, features GPS functionality, and hence permits the tracking of offenders.[230] An emerging third generation of tags additionally features drug or alcohol monitoring capability and thus a form of remote surveillance of the offender's body. Various surveillance and security technologies may also be employed within prisons, such as CCTV systems, perimeter breach detection systems, and visitor background checks.

In relation to the less applied and more critical criminological accounts of surveillance, the themes of 'fear' and 'insecurity' have consistently loomed large, particularly since the widespread adoption of surveillance technologies in crime control and their subsequent prominence in law and order politics. As Jones[231] notes, critical criminological focus on surveillance seems to have stemmed from an increased awareness of the use of CCTV cameras in particular and state surveillance in general, along with the development of surveillance theory which drew from critical sociological views of social control informed by work such as Michel Foucault's *Discipline and Punish*[232], Stan Cohen's *Visions of Social Control*[233], along with Weberian perspectives on surveillance, bureaucracy and rationality.[234] Much of the criminological work on this subject therefore grew from within a political and academic environment which included control, security and insecurity as crucial elements of the analysis. Criminology has also been alert for some decades to the issue of 'fear of crime',[235] the role of the mass media in reflecting or even amplifying public fears and 'panics', and the interactions between fear, media and politics in relation to law and order policy formation, especially of a reactionary kind.[236] Lyon's[237] essential account of

[229] Mueller, Milton, Andreas Kuehn and Stephanie Michelle Santoso, 'Policing the Network: Using DPI for Copyright Enforcement', *Surveillance & Society*, Volume 9, Issue 4, 2012, pages 348-364.
[230] Nellis, Mike 'Out of this World: The Advent of the Satellite Tracking of Offenders in England and Wales', *The Howard Journal*, Vol. 44, No. 2, pp.125-150, 2005.

[231] Jones, Richard, 'Surveillance' in Hale, Chris, Keith Hayward, Azrini Wahidin and Emma Wincup, *Criminology 2nd Edition*, Oxford University Press, Oxford, 2009.
[232] Foucault, Michel, *Discipline and Punish: The Birth of the Prison,* Penguin, London, 1979.
[233] Cohen, Stanley, *Visions of Social Control: Crime, Punishment and Classification.* Polity, Cambridge, 1985; and Cohen, Stanley and Andrew Scull, *Social Control and the State*. Martin Robertson, Oxford, 1983.
[234] Dandeker, Christopher, *Surveillance, Power and Modernity*. Polity Press, Cambridge, 1994.
[235] There is now an extensive literature within criminology on this topic. A good and relatively recent overview and development of research can be found in Farrall, Stephen, Jonathan Jackson and Emily Gray, *Social Order and the Fear of Crime in Contemporary Times*, Oxford, Oxford University Press, 2009.
[236] See for example Cohen, Stan, *Folk Devils and Moral Panics*, HarperCollins, 1973; Pratt, John, *Penal Populism,* Routledge, London, 2007.

surveillance studies reflects this mood, calling for analysis that moves beyond a simple consideration of *where* surveillance is happening, but '*why* surveillance is proliferating today, *what* is behind it, and *who* is affected'.[238]

A significant body of work around CCTV has developed within criminology, some of which attempts to address certain of Lyon's challenges by asking if CCTV has any practical utility or whether it exists purely to satiate public fears and insecurities. UK-based criminological research takes a particular interest in this question, perhaps because of the relatively widespread proliferation of CCTV cameras as crime control measures throughout Britain. The UK is frequently mentioned as having more CCTV cameras per person than anywhere in the world,[239] while Sheldon[240] argues that the most accurate picture of CCTV coverage based on the most recent research suggests that there are about 1.85 million cameras in the UK, which equates to 1 for every 32 people and means that the average person will be captured on CCTV less than 70 times a day, which will happen primarily within the workplace and through shop cameras[241]. Certainly, the ubiquitous nature of surveillance in the UK has prompted criminologists to assess how this situation has been arrived at, if there is any evidence to suggest that CCTV is effective in reducing crime and furthermore, if this widespread measure could in fact represent a significant sacrifice in the name of alleviating fear and insecurity.

Webster[242] notes that CCTV has, since its introduction, been politically justified as fulfilling the role of crime prevention, as well as alleviating 'fear of crime'. The ability for this particular form of surveillance to seemingly attend to public fears has given CCTV added political salience and is a key factor in its unprecedented proliferation. While attending to 'fear of crime' has become a regular feature of political rhetoric, Sheldon[243] also argues that the suggestion that CCTV schemes may allay these fears might have been further solidified by the events surrounding the murder of James Bulger in 1993 and in particular, the widely reported CCTV footage of Bulger being led away: this image was dramatically etched on the minds of the general public and launched the debate about the use of CCTV as a legitimate and necessary means of crime control that could make a real contribution to community safety and to reduce the fear of crime.[244]

The powerful notion that CCTV could be considered integral to solving crimes and thus might protect the public in some way was then reinforced by political action. In the UK, Webster argues that 'as a result of their popularity and perceived effectiveness they have been

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[237] Lyon, David, *Surveillance Studies: An Overview,* Polity, Cambridge, 2007.

[238] Lyon, David, *Surveillance Studies: An Overview,* Polity, Cambridge, 2007, p.2.

[239] Norris, Clive and Gary Armstrong, *The Maximum Surveillance Society: The Rise of CCTV,* Berg, Oxford, 1999.

[240] Sheldon, Barrie, 'Camera surveillance within the UK: Enhancing public safety or a social threat?', *International Review of Law, Computers & Technology,* Vol. 25, Issue 3, 2011, pp.193-203.

[241] Sheldon, Barrie, 'Camera surveillance within the UK: Enhancing public safety or a social threat?', *International Review of Law, Computers & Technology,* Vol. 25, Issue 3, 2011, p.194.

[242] Webster, William, 'CCTV policy in the UK: reconsidering the evidence base', *Surveillance & Society,* Vol. 6, Issue 1, 2009, pp.10-22.

[243] Sheldon, Barrie, 'Camera surveillance within the UK: Enhancing public safety or a social threat?', *International Review of Law, Computers & Technology,* Vol. 25, Issue 3, 2011, p.194.

[244] Sheldon, Barrie, 'Camera surveillance within the UK: Enhancing public safety or a social threat?', *International Review of Law, Computers & Technology,* Vol. 25, Issue 3, 2011, p.194.

further supported by political rhetoric and financial assistance from central government, particularly the Home Office'.[245] In relation to the UK, France and Germany, Hempel and Töpfer argue that a 'surveillance consensus' has developed around CCTV, serving to 'affirm' its institutionalisation and further expansion.[246]Much criminological research on CCTV has questioned the evidential basis for this development and examined whether or not CCTV schemes have any significant effect in reducing crime. Welsh and Farrington[247] assessed the effectiveness of CCTV in preventing crime when compared to the less formal measure of improved street lighting and found that the latter was slightly more effective, while avoiding the sacrifices entailed in widespread CCTV use. Gill and Spriggs' Home Office consolidation of CCTV research[248] surmised that 'it would be easy to conclude… that CCTV is not effective; the majority of schemes evaluated did not reduce crime and even where there was a reduction this was mostly not due to CCTV',[249] while Groombridge maintains 'that there is no rigorously consistent evidence to suggest CCTV cameras work'.[250] One way of attempting to reconcile these lacklustre findings with situational crime prevention's continuing interest in surveillance as a crime reduction technique (see above) is the possibility that, for whatever reason, many real-world implementations of CCTV surveillance systems fail to persuade offenders that they are at greater risk of detection.

While criminological research has not conclusively found CCTV to be particularly effective in reducing crime, a great deal of discussion has simultaneously focused on the potential social and political dangers of these measures. George Orwell's *1984*[251] and its depiction of a dystopian totalitarian state employing oppressive surveillance has had widespread cultural influence especially in the UK, and today the phrase and idea of 'Big Brother' has become an almost inescapable cultural and political meme. Some commentators[252] have also expressed concern over possible 'surveillance creep', in which we as a public too readily accept the erosion of our civil liberties as we become used to monitoring through technologies like CCTV. From a liberal 'rights' perspective surveillance of all kinds has the potential to damage citizens' civil liberties and human rights, and thus remains a prominent concern among sections of the liberal public.

[245] Webster, William, 'CCTV policy in the UK: reconsidering the evidence base', *Surveillance & Society*, Vol. 6, Issue 1, 2009, p.11.

[246] Hempel, Leon and Eric Töpfer, 'The Surveillance Consensus: Reviewing the Politics of CCTV in Three European Countries', *European Journal of Criminology*, Volume 6, Issue 2, 2009, pp. 157-177; though for discussions suggesting how complex and competing political forces (including resistance to CCTV) play out in specific locales and different countries, see Zurawski, Nils, 'From crime prevention to urban development', *Information Polity*, Volume 17, Issue 1, 2012, pp. 45-55; and Galdon Clavell, Gemma, Lohitzune Zuloaga Lojo and Armando Romero, 'CCTV in Spain', *Information Polity*, Volume 17, Issue 1, 2012, pp. 57-68.

[247] Welsh, Brandon C. and David P. Farrington, 'Surveillance for Crime Prevention in Public Space: Results and Policy Choices in Britain and America', *Criminology and Public Policy*, Vol. 3, Issue 3, 2004, pp.497-526.

[248] Gill, Martin and Angela Spriggs, 'Assessing the Impact of CCTV', *Home Office Research Study 292*, Home Office, London, 2005.

[249] Gill, Martin and Angela Spriggs, 'Assessing the Impact of CCTV', *Home Office Research Study 292*, Home Office, London, 2005, p.36.

[250] Groombridge, Nic, 'Stars of CCTV? How the Home Office wasted millions- a radical Treasury/Audit Commission' view', *Surveillance and Society*, Vol. 5, Issue 1, 2008, p. 74.

[251] Orwell, George, *1984*, Harcourt, New York, 1949.

[252] Webster, William, 'CCTV policy in the UK: reconsidering the evidence base', *Surveillance & Society*, Vol. 6, Issue 1, 2009, pp.10-22.

While CCTV is therefore viewed as in many ways a popular yet largely ineffective response to insecurity, a large body of criminological investigation has aimed to better understand why such currency is placed on placating public fears and how policies lacking a compelling evidence base can attract so much funding and public and political support. Away from surveillance and in the field of criminal justice, the relationship between law and order politics and the public fear of crime has been explored by those interested in what has been termed 'penal populism', which critically discusses 'the pursuit of a set of penal policies to win votes rather than to reduce crime or to promote justice'.[253] Pratt proposes that a general sense of insecurity now felt by the public allows politicians to gain success by tapping into the idea that they might 'restore a disintegrating moral and social cohesion'.[254] Indermaur and Hough add that 'the appeal of simplified and tough minded penal policy lies in its ability to resonate with public emotions such as fear and anger … Anyone who wants to improve public debate about crime needs to be attuned to this emotional dimension'. [255] In a similar vein perhaps, the security commentator Schneier has argued that some forms of security amount to little more than 'security theatre'—in other words, measures designed to allay public anxieties rather than confer greater security as such.[256] Transposing these analyses to surveillance raises the question as to whether or not we might speak of 'populist surveillance' to describe surveillance having a more symbolic than practical effect. The transposition does not map easily however, with certain surveillance measures (for example speed cameras and national ID cards) encountering widespread populist opposition; speed cameras appear highly effective and seem resented precisely because of this. Perhaps the difference between penal populism and populist surveillance is that the former gains more populist appeal because it can more easily be targeted (outwards, as it were) at specific kinds of offender, whereas mass surveillance measures turn everyone into a 'suspect'.

More critical criminological accounts therefore view the political utilisation of the idea that the public are more fearful as problematic in the pursuit of rational criminal justice policy, suggesting that the fear might not necessarily be valid, that it might be the subject of some political exaggeration and that this may lead to unnecessary repressive practices. However, this position could be critiqued as an overly liberal approach to social policy in this area. An opposing conservative perspective might view the attention to public fears as a more appropriate function of democratic politics, a response to issues that are properly at the forefront of collective public awareness, and supporting measures necessary to ensure public safety and security. As such, the relationship between public fears and their appropriate representation in politics can be considered one that is bound not just with research evidence and findings but also with political ideology.

There has also been discussion in criminology around the idea of the public as not simply victims of a manipulative political class, but as actors in a genuine shift in the public sense of security, which has arguably had a profound impact upon criminal justice and crime control measures in a number of ways. Bottoms attributes the general rise in punitive emotions to 'the disembedding processes of modernity… as former social certainties are eroded'.[257]

[253] Pratt, John, *Penal Populism,* Routledge, London, 2007, p. 3.

[254] Pratt, John, *Penal Populism,* Routledge, London, 2007, p. 36

[255] Indermaur, David and Mike Hough, 'Strategies for changing public attitudes to punishment', in Roberts, Julian and Mike Hough, *Changing Attitudes to Punishment: Public Opinion, Crime and Justice,* Willan Publishing, Cullompton, 2002, p. 210

[256] Schneier, Bruce, *Beyond Fear*, United States, Springer, 2006, pp. 38-40.

[257] Bottoms, Anthony, 'Philosophy and politics of sentencing reform' in Clarkson, Chris and Rod Morgan (eds) *The politics of sentencing reform,* Clarendon Press, Oxford, 1995, p.47.

Various criminological works have observed the prominence and power of the 'complicated syndrome of anxieties associated with late modernity'[258], with some, including Bauman,[259] arguing that the flexibility of the labour market under deregulated capitalist neoliberal states creates a profound sense of insecurity which is particular to our current political systems. Furthermore, Maruna et al.[260] and Karstedt[261] have argued that those who most strongly feel this sense of general 'ontological insecurity'[262] are more likely to make punitive criminal justice demands. There is, therefore, a body of work within criminology which takes seriously the argument that the public have, because of various political and social structural factors, gradually genuinely become more insecure and have come to express this vocally, thus framing the criminal justice responses accordingly and providing a support base for the introduction of surveillance and security measures. Loader and Walker[263] note that government attention to feelings of 'insecurity' through applications of security can take many varied forms 'span[ning] the end goals of objective safety from threat; the subjective condition of feeling secure; and the assurance or guarantee thereof'.[264] Bauman views this development as inherently suspicious:

In an ever more insecure and uncertain world the withdrawal into the safe haven of territoriality is an intense temptation… It is perhaps a happy coincidence for political operators and hopefuls that the genuine problems of insecurity and uncertainty have condensed into the anxiety about safety: politicians can be supposed to be doing something about the first two just because being seen to be vociferous and vigorous about the third.[265]

The perception of present day law and order politics as manipulative of these feelings of insecurity has, Garland[266] argues, been reinforced by their central role in everyday policy-making and state-building.[267] He views responses as heavy-handed, suggesting that 'the political culture of crime control now takes it for granted that the state will have a huge presence, while simultaneously claiming this presence is never enough'.[268] The result of this approach is that while criminal justice responses become more punitive, and new modes of crime control have utilised security and surveillance technologies, they have also served to highlight the seemingly insurmountable issue of insecurity in society. In essence, the political utilisation of surveillance in crime control has been framed by a need to address late modern 'ontological insecurity', but has ultimately served to reinforce and powerfully demonstrate

[258] Van Marle, Fenna and Shadd Maruna, 'Ontological insecurity and terror management: Linking two free-floating anxieties', *Punishment and Society*, Vol. 12, Issue 1, 2010, p. 8.
[259] Bauman, Zygmunt, 'Social Issues of Law and Order', *British Journal of Criminology*, Vol. 40, Issue 2, 2000, pp. 205-221; cited in Van Marle, Fenna and Shadd Maruna, 'Ontological insecurity and terror management: Linking two free-floating anxieties', *Punishment and Society*, Vol. 12, Issue 1, 2010, p. 8.
[260] Maruna, Shadd, Amanda Matravers and Anna King, 'Disowning our shadow: A psycho-analytic approach to understanding punitive public attitudes', *Deviant Behavior*, Vol.25, Issue 3, 2004, pp. 277-299.
[261] Karstedt, Susanne, 'Emotions, crime and justice: Exploring Durkheimian themes', in Deflem, Mathieu, *Sociological theory and criminological research*, Elsevier, Amsterdam, 2006.
[262] Giddens, Anthony, *The consequences of modernity*, Polity Press, Cambridge, 1990.
[263] Loader, Ian and Neil Walker, *Civilizing Security*, Cambridge University Press, Cambridge, 2007.
[264] Loader, Ian and Neil Walker, *Civilizing Security*, Cambridge University Press, Cambridge, 2007 in Zedner, Lucia, *Security*, Routledge, New York, 2009, p. 13.
[265] Bauman, Zygmunt, *Globalization: The human consequences*, Polity, Cambridge, 1998, p. 117.
[266] Garland, David, *The Culture of Control*, Oxford University Press, Oxford, 2001.
[267] For a different argument relating to a similar topic, see Melossi, Dario, *Controlling Crime, Controlling Society: Thinking about Crime in Europe and America*, Cambridge, Polity, 2008, Ch. 9.
[268] Garland, David, *The Culture of Control*, Oxford University Press, Oxford, 2001, p. 173.

the need for a sense of constant anxiety. However, Rock suggests that rather than surveillance functioning as soothing anxieties, instead:

[As] Foucault and those who followed him wished to argue, modern society is coming to exemplify the perfection of the automatic exercise of power through generalized surveillance… Public space [is] becoming exposed to ever more perfunctory, distant and technologically driven policing by formal state agencies; while control in private and semi-private space… was itself becoming more dense, privatized and widespread, placed in the private hands of security guards and store detectives, and reliant on a new electronic surveillance.[269]

Notwithstanding such a scenario - or perhaps better to address the question as to how security should be approached - Loader and Walker note that existing stances include those *promoting* security, those seeking 'to *counter* security', and those seeing security as a means of achieving 'a more profound sense of 'well-being' or 'ontological' security'.[270] Proposing 'a fourth position', Loader and Walker aim at 'reconceptualizing security…as a… 'thick' public good'.[271] They recognise that security should aim to support individuals, but they also argue that 'security is about the *relationship* individuals have to the intimates and strangers they dwell among and the political communities they dwell within'. There is therefore 'an intimate link between security and generic questions of social connectedness and solidarity'.[272] Security, then, in political philosophical terms, is both part of 'a tightly enmeshed and self-reinforcing set of relations', and 'presupposes and consolidates the idea of a resilient unit of political community'.[273] If they are correct, what are the implications for our understandings of surveillance, fear and insecurity? The answer may be that we should not dismiss the potential of surveillance and security measures to confer some social good (and not merely of an immediate kind, but also in terms of wider social benefit), yet at the same time remain cognisant of the particular social good we are trying to obtain (which may therefore involve insisting on checking and holding accountable particular practices to ensure they remain correctly oriented).

1.6 REPRESENTATIONS OF SURVEILLANCE – SHAPING PERCEPTIONS, THE MEDIA AND POPULAR CULTURE

Surveillance is an abstract notion, and as such, it is difficult to present or visualise in itself. However, there exists numerous manifestations of surveillance in practice, and one can experience surveillance in various forms, from the evident to the sophisticated or latent. These manifestations, similarly to the positive and negative ideas constructed about surveillance, curiosity and fear, trust and distrust, relationships between individuals, between state and society and between stronger and weaker parties, are reflected in the media, popular culture and various artistic genres alike. One can consider surveillance as a fundamental element of the relations between people and institutions, and as such, it is a permanent

[269] Rock, Paul, 'Sociological Theories of Crime' in Maguire, Mike, Rod Morgan and Robert Reiner (eds), *The Oxford Handbook of Criminology (5th Edition)*, Oxford University Press, Oxford, 2012, p.58.
[270] Loader, Ian and Neil Walker, *Civilizing Security*, Cambridge University Press, Cambridge, 2007, pp. 10-15.
[271] Loader, Ian and Neil Walker, *Civilizing Security*, Cambridge University Press, Cambridge, 2007, p.16; see also Krahmann, Elke, 'Security: Collective Good or Commodity?', *European Journal of International Relations*, Volume 14, Issue 3, 2008, pp. 379-404.
[272] Loader, Ian and Neil Walker, *Civilizing Security*, Cambridge University Press, Cambridge, 2007, p.18.
[273] Loader, Ian and Neil Walker, *Civilizing Security*, Cambridge University Press, Cambridge, 2007, p.259.

element of our culture, an eternal topic of communication. It is especially so if we regard surveillance in an extended sense, like Gary Marx does in a recent paper in which he interprets *surveys* as a virtual synonym of surveillance.[274] But even if we take surveillance in a narrow sense,[275] where there is an information asymmetry between the partners (the surveilling party is in the stronger position), surveillance is performed secretly (or at least in a non-transparent way), and not wanted by the subject (or her opinion is not asked), there are numerous manifestations of surveillance in the above areas and genres, sometimes in a direct form, sometimes hidden in stories and situations, and these direct and indirect representations significantly influence our opinion and judgment on surveillance.

As Draaisma, Dutch psychologist and historian of psychology vividly demonstrates, our ideas about abstract notions are fundamentally determined by the technological developments of the age we live in, the technology surrounding the person imagining the notion, the tools which the person knows and the way he visualises the operating and functioning of these tools.[276] For example, memory in the antiquity was imagined as a wax tablet, in the age of mechanics as a complicated machine, in the 19th century as a location on the map of the brain, and today as a virtual computer (and at the same time computers are imagined as the neural network of the brain). Similarly, surveillance had been imagined and symbolised throughout cultural history from the Elders peeping at Susannah in the Old Testament story, through Indians putting their ears to the ground to find out if somebody was coming, through secret agents wiretapping phone lines in dark mansards, and through images of CCTV cameras and teenagers shooting photos with their mobile phones, to the images of sophisticated computerised equipment. Surveillance has been symbolised according to our imagination of these surveillance tools and means; and these tools and means became the visual icons of the representation of surveillance in different historical periods. Naturally, the form and content of representation are also determined by what kind of audience it is intended for, in which genre it appears, and what the presenter themself thinks about surveillance. Surveillance is rarely represented in itself as an abstract phenomenon, rather as portraying surveillance situations, illustrating surveillance relationships, or showing real or imaginary surveillance scenarios. Since representation of surveillance is rarely value-neutral, the underlying message has both intended and unintended effects on the judgment of the receiver. Today representations of surveillance can be observed in numerous areas and genres, in mainstream media, professional press, various forms of marketing and propaganda, in popular culture, in various forms of mainstream art, and in the virtual portfolio of alternative movements and artistic genres. In the following paragraphs, from this wide spectrum, we will present some characteristic elements which shape public perception, and that of various subcultures, of surveillance.[277]

[274] Marx, Gary T., "Surveys and Surveillance", in Frederick G. Conrad and Michael F. Schober (eds.), *Envisioning the Survey Interview of the Future,* John Wiley & Sons, Hoboken, New Jersey, 2008, pp. 254-266.

[275] There exist specific definitions of surveillance in certain professions, for example in medicine, but these fall outside of the scope of the present analysis.

[276] Draaisma, Douwe, *Metaphors of Memory: A History of Ideas About the Mind.* Cambridge University Press, 2000.

[277] In this chapter English language examples and examples from the UK and the US are probably over-represented, partly because our literature review has been focused on publications available in English, the common working language of the project, and partly because globally significant innovations were introduced in these two countries in the area of representation of surveillance.

1.6.1 Big Brother culture

As Albrechtslund and Dubbeld pointed out in a short paper on surveillance studies[278] - intended to set a new direction in research – surveillance has not only clearly positive and negative implications, in other words, caring-enabling or controlling-constraining functions, but there exists surveillance-centric technologies and artistic genres, which may have entertainment functions, too. For example, certain computer games and their real-life versions can be regarded as such, and the emergence of surveillance as a theme in art can also be regarded as part of the domain of entertainment.[279] The latter will be discussed separately in this chapter, however, surveillance as a basic element of certain large-scale entertainment genres is presented below.

The predecessors of "reality shows" came into existence soon after the Second World War, in the form of candid camera and candid microphone recordings,[280] and in the next decade numerous radio and television productions were created in order to reflect reality in a non-scripted manner, i.e. recording and broadcasting amateur actors in real-life situations. Perhaps the most popular of these productions was the television programme: *An American Family*, broadcasted in the early 1970s, and later - in 2002 - listed among the TV Guide's 50 Greatest TV Shows of All Time, the list of the most entertaining or influential television series in American popular culture. However, reality television shows, as we understand it today, became widespread and popular only in the 2000s. The amateur actors in *Big Brother, Survivor, American Idol, Zone Reality* and other series became subjects of regular or even continuous surveillance in numerous countries where these programmes were broadcasted or adapted to the local circumstances.

"Big Brother culture" is relating to the extended interpretation of surveillance, since here we cannot speak about secret surveillance: the actors voluntarily (or possibly more accurately, for money, instant popularity or other real, or imaginary, advantages) undertake the role of the surveilled. The audience, however, regards such programmes as unambiguously entertaining and fun. One of the consequences is that the majority of viewers or listeners regard the symbol of "Big Brother" harmless, amusing, even positive, in contrast to the earlier negative, Orwellian connotation. We should not forget here the social compensatory role of mainstream television programmes either: the viewers can see situations, behavioural norms, properties, patterns of style and taste, which they would be otherwise unable to see in

[278] Albrechtslund, Anders and Lynsey Dubbeld, "The Plays and Arts of Surveillance: Studying Surveillance as Entertainment", *Surveillance & Society* 3(2/3): 216-221 (2005), http://www.surveillance-and-society.org/Articles3%282%29/entertainment.pdf

[279] An early example of analysing surveillance in popular culture is Gary Marx's alternative text for the song by The Police "Every Breath You Take" suggesting that the lyrics reflects the feeling of being under surveillance, and modern surveillance equipment. Although later it became known that the lyrics was inspired by breaking a private relationship, Marx's cultural analysis has been widely referred to, including: M. D. Kirby's "Access to Information and Privacy: The Ten Information Commandment" (*Archivaria 23*, Winter 1986-87), by Marx himself in "Electronic Eye in the Sky: Some Reflections on the New Surveillance and Popular Culture" (in David Lyon and Elia Zureik (eds.), *Computers, surveillance, and privacy*, University of Minnesota Press, 1996) or by David Lyon in his *Surveillance Studies: An Overview* (Polity Press, 2007).

[280] The originator who coined the name of these non-scripted programs already in the 1940s was Allen Funt, who later became a famous television personality in the US, and author of several books, such as *Eavesdropper at Large: Adventures in Human Nature with "Candid Mike"* (Vanguard Press, 1952).

real life because of their social status or chances. Reality shows also have such a function – although what we see on screen is naturally not the "reality" but a commercialised representation of it, fine-tuned by psychologists and marketing experts. One of the appealing features of the current popular series, such as the American reality show *Bad Girls Club* or the UK series *Faking It, The Hills,* originally aired on MTV, or *The Real World,* the longest-running programme in MTV, is exactly this: "pushing the envelope", in other words, presenting lifestyles and conflicts deemed controversial in "public morals", and a central dramaturgical element (and scenery) of this is surveillance. Perhaps this is the situation (namely that the viewer may distance themself from the story, since their role is that of the observer "peeping through the keyhole") which may legitimise the controversial scenarios for the viewers, and at the same time the surveillance situation, too.

Mainstream film

Mainstream film is understood here as motion picture genres produced for a general audience, originally intended for screening in movie theatres (although they are also accessible through television and other media), and using a film language generally known by the audience. (Alternative or experimental motion picture genres will be discussed separately.) For example, we know that when smaller objects and persons are at a greater distance from the viewer, scenes following cuts represent different - mostly subsequent - time periods, and in the case of repetitive events the films generally use a concentrated representation of the events. Although artistic films are always expanding the range of these tools, the basic film language is understandable for a wide range of audiences.

If we accept that surveillance is a basic element of the relationships between people (and between people and institutions), it is evident that surveillance is represented in these films in numerous ways, let it be fiction or non-fiction. In most cases surveillance is not specifically emphasised in the screenplays, its presence is a natural part of the story. However, there exists some films in which surveillance is a core element, such as *The Matrix* (by Larry and Andy Wachowski, 1999); *The Lives of Others* (Henckel von Donnersmarck, 2006), or *Catfish* (Schulman and Joost, 2010) - to mention but a few in different styles. Philosophers, film aesthetes, social scientists and other researchers have analysed how surveillance is represented in such films. Parti and Zavrsnik set up an inventory of about hundred mainstream films in which surveillance constitutes an important part and categorized them, among others, according to the message transmitted, the surveillance technology used, the behaviours portrayed, and whether or not there is an East-West divide in the perception of surveillance.[281] Kammerer compiled an annotated list of about sixty surveillance feature films from existing databases.[282] Muir demonstrated a paradigm shift in surveillance from discipline to control by analysing how cinema engages with changing surveillance practices.[283] In the course of her research Muir analysed, among others, such successful films as the psychological thriller *The Conversation* (by Francis Ford Coppola, 1974); *The Lost Honour of Katharina Blum* (by Volker Schlöndorff and Margarethe von Trotta, 1975); the spy-thriller *Enemy of the State* (by Tony Scott, 1998), and *Minority Report,* Steven Spielberg's science fiction from 2002, and came to the conclusion that filmmakers are

[281] The research is part of the Living in Surveillance Societies (LiSS) COST Action, supported by the European Commission: http://www.liss-cost.eu/

[282] http://www.surveillance-studies.net/SSN/wp-content/uploads/2010/07/List_surveillance_feature_films.pdf

[283] Muir, Lorna,"Control Space?: Cinematic Representations of Surveillance Space Between Discipline and Control", *Surveillance & Society* 9(3): 263-279 (2012), http://library.queensu.ca/ojs/index.php/surveillance-and-society/article/view/control_space

sensitively portraying the shifting paradigms of Foucault's discipline society and Deleuze's control society, the increased state and corporate cooperation, the emergence of the virtual self and data doubles, and the changing notion of time and space. Albrechtslund concentrated on two central dilemmas concerning the ethics of surveillance, justification and responsibility, when analysing two classic surveillance films, *The Conversation* and Alfred Hitchcock's *Rear Window* (1954).[284] He admits that "rather than giving us answers, the protagonists of both films embody the persistent ethical dilemma of surveillance".

It should be noted that surveillance itself is represented in these film in different ways, and their messages on surveillance are not identical either. For example, *The Lives of Others* is a dramatic and at the same time empathetic portrayal of participants in a past dictatorship's surveillance practice, while *The Life of an Agent* (Gábor Zsigmond Papp, 2004), which combines original scenes from formerly classified educational films of the Hungarian state security with newly created sequences, presents an ironic criticism of the former political system. In other films surveillance may play a positive or even entertaining role, similarly to reality shows.

Advocate or activist films

These films – mostly short films – which are produced for advocate or activist organisations in various motion-picture genres constitute a separate category: although these films also use a well-known film language and effects, their distribution channels and target audience are different from those of the mainstream films. Rarely, such films can be seen as public service announcements before full length films in liberal movie theatres, but viewers can mostly watch them at events of civic organisations, conferences, or on professional or activist websites. One of the most well-known such surveillance-related short video is *Pizza Surveillance Feature*, created by Micah Laaker in 2004, for the American Civil Liberties Union (ACLU) in the form of a flash animation. In this animation the viewer is witness of a pizza ordering by telephone: the male voice of the ordering party can be heard only over the phone, but we can see the computer display of the female employee at the call centre, what she sees about the person trying to order his pizza - in other words, the viewer can follow dataveillance in quasi real-time.[285]

Another popular short film parodying surveillance as anti-terrorist means, *Nothing to hide*,[286] criticises those who say they are willing to give up privacy and civil liberties in exchange for safety, and shows how the life of a law abiding, conservative, average American is systematically destroyed by surveillance. Non-governmental organisations, such as professional associations, also have series of short films created about themes criticising the practice of surveillance. In the short films of PROSA, the Danish Association of IT Professionals: (*Peeping Toms and the Postman, Big Brother is on the Telephone, Unforgettable – They know everything about you*),[287] deserves attention that these films express critical opinions of those who realise and operate surveillance systems – i.e. the IT

[284] Albrechtslund, Anders, "Surveillance and Ethics in Film: Rear Window and The Conversation", *Journal of Criminal Justice and Popular Culture*, 15 (2), 2008, http://www.albany.edu/scj/jcjpc/vol15is2/Albrechtslund.pdf

[285] Available at http://www.aclu.org/pizza/images/screen.swf In 2005, at the 5th Annual "Media That Matters" Film Festival Laaker took the top honor in the Civil Liberties category for this work.

[286] First broadcasted on the Liberty News TV program, a US monthly grassroots progressive television news program, aired by Free Speech TV, in February 2006. Available at http://www.youtube.com/watch?v=70p_VjsiIdk

[287] Available at http://pet-portal.eu/gallery/view/15/?set_language=eng

professionals themselves – towards electronic surveillance of communication. This category also includes the short films created by professional filmmakers in the framework of a Dutch-Hungarian project, BROAD (Broadening the Range Of Awareness in Data protection),[288] aimed at raising awareness in the area of data protection and information privacy by using innovative means and methods (*Nail polish, Heavy birthday, Flower power, Dream guy*).[289]

The apparent message of these films is criticising or parodying various surveillance practices. Their envisioned impact is diverse; the closing phrase of Pizza calls for action: *"Want to stop this from happening? Take action!"*, while the packs hot of the BROAD series is rather awareness-raising: *"Internet, Mobile, Chip card. Don't let them know all about you!"* – do you realise what environment you are living in.

1.6.2 Alternative representations, surveillance art

Contemporary art and artists are sensitive indicators of social relationships, individual feelings, power structures and technological developments alike. Surveillance in general is a natural, persistent component of the themes and representations of art works, however, there are artists, works of art, and even artistic genres, whose central theme is surveillance and being under surveillance. This specific branch in contemporary art is often called Surveillance Art, and its creators' surveillance artists. Since surveillance itself is a multi-faceted phenomenon, it is not surprising that art is responding to this phenomenon in various ways, and new media and performance artists use surveillance not only as their theme but also as a means to create works of art, or a technical tool to create effects and other elements of their works.

The works of early surveillance artists reflect a concentrated, critical approach towards surveillance. A prominent artist of this group, Julia Scher creates temporary and transitory web/installation/performance works, which explore issues of power, control and seduction. Her series of installations called *Security by Julia* often involve a person – the artist herself – wearing a security uniform, and an invitation to the viewer to actively participate in surveillance culture.[290] The viewers of these works may feel the complexities of fear and desire of being monitored, as well as the artist's exhibitionism.

In the last decades, especially in the new millennium, new media art and performance art are increasingly using surveillance as an element of the technical toolbox of everyday life, without the inherently critical approach of earlier works. A group of art works and artists use either the images recorded by surveillance equipment, or simply the motion of people, cars or other objects for generating new images or change in lighting etc. Christian Moeller in his 2006 project, *Nosy*, used CCTV camera images randomly recording a street environment and projected the images onto architectural structures in Tokyo.[291] Camille Utterback transformed pedestrians' location and movement into abstract shapes which the artist projected onto the city hall of San Jose, California in her *Abundance* project in 2007.[292] The Los Angeles-based artist team, Electroland, use participants' movements and locations for changing lighting in

[288] http://www.broad-project.eu/

[289] Available at http://pet-portal.eu/gallery/view/5/?set_language=eng

[290] Julia Scher, *Tell me when you're ready: works from 1990-1995*, PFM Publishers, 2002; Schneider, Caroline and Brian Wallis (eds.), *Julia Scher, always there* Sternberg Press, 2002.

[291] http://www.christian-moeller.com/display.php?project_id=59&play=true

[292] http://www.CamilleUtterback.com/abundance.html

buildings, bridges and other architectural structures (*Enteractive, Connection, Target Breezeway, Lumen,* and *Drive By* projects).[293]

Value content (and critical approach) can be best detected in the performances of activist-minded performance groups. Perhaps the most influential of them is Surveillance Camera Players (SCP), based in New York City, who are "completely distrustful of all government",[294] and whose repertoire is broader than surveillance-related performances and can be regarded as main innovators of street performances.[295] SCP performers mix the playful with the critical, and often disturbingly call the attention of the bypassing audience to the omnipresence of surveillance equipment. In their quasi-manifesto *Guerrilla Programming of Video Surveillance Equipment* from the mid-nineties they stated that "Guerrilla programming is direct: it is a simultaneous exposure of the oppressive system and subversion of that system to inform the oppressors (and anyone else who may be watching us) of their own ridiculousness and complicity."[296] Sister groups have been formed in other US cities, as well as in Italy, Lithuania, Sweden, Turkey and Hungary.

Similarly critical are the graffiti artists who are working on the border area of activism and art. Banksy, a famous pseudonymous artist, political activist, film director and painter illegally paints spray-can images in public spaces, such as the giant graffiti reading "One Nation Under CCTV", but also creates rehashed paintings and sculptures dealing with political and social themes, which are exhibited during carefully organised events without revealing the identity of the artist. While contemporary art works displayed in exhibition halls, alternative websites or blogs reach certain subcultures, activist street performances and graffiti works target passers-by and provoke reactions from a wide audience. Even if these reactions reflect incomprehension, laughter, aggression, or calls for law enforcement measures, these works also have an important awareness raising function.

The paradigm shift in surveillance from discipline to control, as demonstrated in the domain of mainstream films by Muir, can also be observed in contemporary art: while concentrated criticism towards information power can still be found in certain genres (especially in performance art), surveillance became a "democratized", value-neutral tool in the work of new media artists. Theorists are still debating whether Surveillance Art exists at all, or surveillance has become so ubiquitous as to make its use as an artistic category meaningless,[297] however, this subject has triggered the emergence of new art genres, such as surveillance street performances, or CCTV film, to be discussed below.

CCTV Film-making

CCTV filmmaking has been inspired by the omnipresence of CCTV cameras, both as tools of surveillance and as a recording (filmmaking) equipment. The fundamental rules of CCTV filmmakers are summarised in the *Manifesto for CCTV Filmmakers,*[298] created by a group of experimental and socially critical filmmakers. Their leading figure is Manu Luksch, founder of Ambient Information Systems, a group of artists creating collaborative, interdisciplinary

[293] http://electroland.net/projects/
[294] http://www.notbored.org/the-scp.html
[295] http://www.notbored.org/scp-performances.html
[296] http://www.notbored.org/gpvse.html
[297] see McGrath, John and Robert Sweeny, "Surveillance, Performance and New Media Art", *Surveillance & Society* 7(2): 90-93 (2010), http://www.surveillance-and-society.org/ojs/index.php/journal/article/viewFile/performance_ed/performance_ed
[298] http://www.ambienttv.net/content/?q=dpamanifesto

and critical artworks, events and tools at the interface of social and technical infrastructures.[299] It is not surprising that the Manifesto has been drafted in Great Britain, where the presence of CCTV cameras is penetrating everyday life. The manifesto is constructed with reference to the UK Data Protection Act 1998 and related court judgments, but can easily be adapted for different jurisdictions. It declares rules such as "The filmmaker is not permitted to introduce any cameras or lighting into the location", i.e. they should only use the CCTV equipment of the chosen venue; or "All people other than the protagonist ("third parties") will be rendered unidentifiable on the data obtained from the CCTV operators." Luksch and her fellow artists working under the name *ambienttv.net*[300] have addressed surveillance as part of their intensive cultural critique pursued through a "low-fi" new media art and technological activism and "low-fi" digital aesthetic, and created an unusually direct contact between experimental art and law in this area. Luksch's *Faceless*, a fifty-minute experimental film made under the rules of the Manifesto, depicts a society under constant surveillance, where there is neither history, nor future, and everybody is faceless.

There are films using a commonly known film language but produced exclusively by CCTV equipment. The best example is *The Duellists* (David Valentine, 2007), a film created with outstanding virtuosity, using an in-house CCTV network of 160 cameras operated from the central control room in the Manchester Arndale Shopping Centre, with a soundtrack created entirely from the sounds and noises recorded during the performance. The choreographed performance of two acrobatic free-running performers was filmed in the empty shopping centre over three consecutive nights, and although the viewer is impressed by the performance itself, the surveillance milieu is unmistakable. In Piotr Klarowski's *You Are Being Tracked* people captured by 7 different CCTV cameras within a small area are automatically detected and 'trapped' in superimposed, digitally generated shapes, "boxes", exploring parallels between security systems and informal video games.[301] Chris Oakley's *The Catalogue* (2004) mixes (simulated) CCTV images, natural sound and data from computer screens on purchasing habits and lifestyle choices of consumers in a retail environment.[302] The credo of the creators of *Surveillance Society* is best illustrated by the comment of Rageunderground who uploaded the video on YouTube: "To be governed is to be watched, inspected, spied upon, directed, law-driven, numbered, regulated, enrolled, indoctrinated, preached at, controlled, checked, estimated, valued, censured, commanded, by creatures who have neither the right nor the wisdom nor the virtue to do so."[303]

Other films are not using CCTV equipment, but instead document the operation of surveillance cameras or anti-surveillance and awareness raising actions, such as *CCTV Britain* by Kyron Goode,[304] or create awareness raising stories in a virtual CCTV environment, e.g. *CCTV. (Short Film)* by ThirdTakeProductions.[305] The Surveillance Camera Players have also recorded some of their performances through CCTV equipment, such as *1984*, or – in a broader context – *Someone to watch over you* and *Under surveillance* (Brooke Nixon, 2002).[306] Hi-jacking, re-using and remixing CCTV signals became a popular tool

[299] Luksch, Manu and and Mukul Patel, *Ambient Information Systems*, AIS 2009. Edition of 1,500 unique & numbered.
[300] http://www.ambienttv.net/content/?q=about
[301] http://vimeo.com/12733633
[302] http://www.youtube.com/watch?v=vZikPUSQnjs
[303] http://www.youtube.com/watch?v=TKDpSoqPaZQ
[304] http://www.youtube.com/watch?v=DA3gVF-zg9w
[305] http://www.youtube.com/watch?v=0-cvK2wqobs
[306] Downloadable from http://media.sas.upenn.edu/pennsound/groups/FactorySchool/SCP/

among CCTV filmmakers in recent years. Benjamin Gaulon, French artist and researcher (aka RECYCLISM) created a software called RandomMe CCTV Randomizer,[307] which can handle the signal of four CCTV cameras. The software randomly plays frames from the buffer memory of the computer and presents real time events and past events at the same time. The clips under the title *Auf Wiedersehn!* (produced by *e-flux/bitnik*) are composed of CCTV video signals captured by pirate receivers operated by the filmmakers in the city of Berlin.[308] These images are used for a sort of personal narrative of the city but can also be regarded as a form of *sousveillance,* since it reveals surveillance practices by making images visible which normally remain hidden.

1.6.3 Sousveillance, equiveillance and autoveillance

Sousveillance

The term "sousveillance" has different, often competing interpretations, which may disturbingly blur the underlying ideologies of surveillance: one interpretation relates to inverse surveillance - that is, "watching the watchers" - thereby trying to balance the inequality between the surveilling and the surveilled; while another interpretation relates to "democratic", mutual surveillance of the members of society - that is, "omniveillance" - thereby, in theory, reducing or eliminating the need for classic forms of surveillance. Inverse surveillance inspired the World Sousveillance Day, an annual event organised in several countries on December 24, the busiest shopping day of the year, to "shoot back" against those who are surveilling unknowing consumers. In another area, a network of US and Canadian volunteer organisations, Copwatch,[309] is videotaping, archiving and publishing police activity; Fitwatch, a UK activist group is photographing Forward Intelligence Teams (police photographers).[310]

One specific branch of sousveillance called *personal sousveillance* - also referred to as "coveillance",[311] namely lifelong audiovisual recording of personal experiences by way of small wearable or portable personal technologies (cybernetic prosthetics), such as seeing-aids, visual memory aids; performing continuous live webcast or real-time visual reality modification, is often regarded as a form of art. The most famous figure of this area is Steve Mann, who has developed an oddly spectacular lifestyle for himself by continuously wearing such equipment since the 1980's. Interestingly, several analyses and collections of Surveillance Art genres and artists include Mann's activity,[312] thereby indicating that he represents a peculiar, non-trivial response to challenges of surveillance practices of today's society (at the same time indirectly indicating the limits of such activity).

The fact that Mann's activity does not represent an adequate response to the modern urban environment in the eyes of the general public is best exemplified by a much publicised

[307] http://www.recyclism.com/randomme.php

[308] http://archive.org/details/auf_wiedersehen; see also http://www.youtube.com/watch?v=e6BNRdDtb0I

[309] http://www.copwatch.org/

[310] http://www.fitwatch.org.uk/about/

[311] Mann, S., Jason Nolan and Barry Wellman, "Sousveillance: Inventing and Using Wearable Computing Devices for Data Collection in Surveillance Environments", Surveillance & Society 1(3): 331-355, http://www.surveillance-and-society.org/articles1%283%29/sousveillance.pdf

[312] For example the wiki of Catherine Summerhayes; University of Sydney, http://cathiesummerhayes.wetpaint.com/page/Surveillance+Art. or the Surveillance Art article in Wikipedia, http://en.wikipedia.org/wiki/Surveillance_art

physical assault Mann had to suffer in a French fast food restaurant in July 2012,[313] when employees tried to remove the recording equipment from his body (which would otherwise need medical intervention). The case stirred a heated debate in an internal discussion forum of privacy experts and advocates[314] in the course of which certain experts expressed an opinion that, apart from the otherwise unacceptable case, what Mann is doing by watching and recording the activities of fellow citizens is but a digital assault on other people anyway.

Equiveillance

Equiveillance is a sister concept of sousveillance, a state of equilibrium, or a desire to attain a state of equilibrium, between surveillance and sousveillance. It is also an ideology which expects the equalisation of power inequalities by way of democratising surveillance tools and practice. In this ideology the visions of equalisation by inverse surveillance and by democratisation of surveillance practice can be found alike, similarly to the illusions expecting democratisation of informational power by democratisation of information technology.

In 2005 at the annual Computer, Freedom and Privacy (CFP) conference of the ACM[315] participants received a conference bag with a wireless dome camera attached onto the bag, transmitting video signals about participants' movement and environment.[316] A group of participants joined a team organised by Steve Mann and participated in a field-work experiment: wearing their conference bags with the dome cameras as they visited nearby shops and spectacularly performed inverse surveillance towards the security cameras of the shops. The reactions of shopkeepers and their attendants clearly demonstrated the dominant approach and power positions: shopkeepers were convinced that they were in a naturally stronger position, thus they are "entitled" to use surveillance cameras, whereas consumers are not. Something similar happened in Mann's assault several years later, in a different - however, increasingly globalised - cultural environment. Hasan Elahi, a professor from Rutgers University, after having been detained at an airport because he shares the same name as a person on the US terrorist watchlist,[317] started to produce sousveillance – more properly, "autoveillance" – for his entire life as a sort of protest (but also as a self-defence), using his cell phone as a tracking device and publicly posting debit card and other transactions that document his actions.

Autoveillance

There are others, too, who record "every moment" of their life for different reasons, often with strong industrial support and PR, and use the possibilities and capacity of new ICT to perform autoveillance. Gordon Bell, computer scientist is the experimental subject of a Microsoft Research project, MyLifeBits, which tries to collect, and provide easy access to a lifetime of storage on and about Bell. MyLifeBits includes an experiment in life-logging, that is, the automated storage of the documents, pictures and sounds an individual has experienced in her lifetime. Bell has collected and digitised in a more or less automated way

[313] See for example http://www.dailymail.co.uk/news/article-2175062/EyeTap-augmented-reality-pioneer-Steve-Mann-assaulted-Paris-McDonalds-employees.html or Mann's own blog at http://eyetap.blogspot.com.au/2012/07/physical-assault-by-mcdonalds-for.html

[314] The forum of Advisory Board Members of Privacy International

[315] http://www.cfp2005.org/

[316] Not all bags had real cameras installed behind the domes but participants were not aware which bags were "active".

[317] The retrospective story can be read, inter alia, at http://www.nytimes.com/2011/10/30/opinion/sunday/giving-the-fbi-what-it-wants.html?_r=1&pagewanted=all

all documents he has read or produced, his CDs, emails, web pages browsed, phone and instant messaging conversations and the like. The reader of the book written about the experiment[318] may realise that personal, lifetime e-memory involves a vision for virtual eternity. The common characteristics of these experiments and their media representations is that ICT is regarded as the unambiguous benefactor of mankind,[319] and informational power implications are not taken into consideration.

If we want to summarise the various representations of surveillance and their impact on public perception, we need to separate two aspects: first, what do people regard as surveillance, what is the connotation of the notion itself, and second, what is their opinion about it. (We do not discuss here the third possible aspect, whether or not people realise surveillance practices at all.) It can be assumed that in societies and subcultures where the level of social capital (in the sense of trust in others, in people we don't know, in institutions) is higher, the notion of surveillance bears a less negative connotation than in societies with a lower level of social capital or in former dictatorships. This could certainly be demonstrated in linguistic analysis, as has already been initiated.[320] Such a cultural and linguistic environment apparently influences the image suggested by media or art works, since even in the age of globalisation there are national cultural and linguistic differences between creators or content producers, and their representations have an impact on the audience.

As to opinions, we cannot expect significantly differing, clear-cut judgments on surveillance in the audiences of the genres and representations discussed above, (and these audiences are overlapping each other), but it can be assumed that members of critical thinking, socially engaged groups are more receptive towards messages of activist-minded, critical representations of surveillance. However, there might be differences in how people regard surveillance in general, whether as a natural component of life today, a sort of main rule, or an extraordinary phenomenon, a sort of exception - if they realise it at all. In these differences not only the media consumption of the people, or their affinity to art, have a role, but also their general level of being informed, personal history, life circumstances, social status and a number of other factors, too. A significant part of the population watch television, consuming entertaining, popular programmes, therefore the images reflected in these programmes presumably influences their opinions. There are studies, which have described and analysed the representations of surveillance in certain characteristic genres, as well as their specific impacts - some of which we have referred to in the foregoing - however, we do not know of the existence of comprehensive analysis aimed at investigating the impacts of various representations of surveillance in various sectors of media-consuming population in a synoptic way.

Such a comprehensive analysis would be an important research theme in surveillance and media studies. Representations of surveillance and its impact have an important role in understanding what people regard as surveillance and what their opinion is about surveillance, and thus might contribute to the fine-tuning of empirical research, for example,

[318] Bell, Gordon and; Jim Gemmell, *Total Recall: How the E-Memory Revolution Will Change Everything.* Dutton Adult, 2009.

[319] *Total Recall* has been published in paperback under the illustrative title *"Your Life Uploaded: The Digital Way to Better Memory, Health, and Productivity"* (Plume, 2010).

[320] Such a multilingual comparative analysis has been outlined in the Living in Surveillance Societies (LiSS) COST Action.

by drafting similar questions in different ways in groups of population with a differing cultural consumption.

1.7 RESISTING AND NEGOTIATING SURVEILLANCE

As many authors have shown, surveillance has always existed. However, with the proliferation of new surveillance technologies, the concept of the 'surveillance society', with its suggestion of ubiquitousness, is getting more and more attention and recognition by the media and the public alike. From a sociological point of view, this means that people are getting more and more acquainted with and socialised in the context of this surveillance society, but also that, as a consequence of this increased use,[321] instances of resistance, rejection or negotiation may arise in our daily interaction with surveillance technologies. Most of the surveillance literature has so far approached this aspect of surveillance by focusing on the negotiation aspect, highlighting how the paradoxical situation we find ourselves in, where increased use goes hand in hand with increased concern, points to the possibility that people perceive surveillance as 'the price to pay' to access a greater good - in the case of the internet, being 'connected' and its advantages in terms of sociability, social capital, work opportunities, etc., and in the case of smart consumer cards, personalised discounts. In fact, the literature often assumes that citizens accept a loss of privacy and an increased infringement of their rights if that puts them closer to particular interests and needs.

However, this trade-off approach has been contested,[322] and there is an increasing body of work that indicates that there is a significant amount of people who refuse to be surveilled or are willing to take specific actions to stop or resist the collection of their personal data. It is still unclear why some people or groups are more willing to engage in resistance practices than others, but most scholars agree that resistance and negotiation do exist, and take many forms - they can be intentional or unintentional, organised or ad-hoc, routine or one-offs, etc. When looking at instances of resistance, some predict that resistance will become more difficult - Gilliom and Monahan, for instance, assert that one of the central elements of everyday resistance to surveillance, 'not giving up information', will become harder as 'the space necessary to perform everyday resistance will certainly become more restricted and tightly regulated'.[323] Others, on the other hand, contend that there are reasons to believe that the proliferation of surveillance technologies can breed resistance and discontent, as more people are faced with the actual working and limitations of such technologies and thus less prone to having unreasonable expectations in relation to their ability to stop crime and insecurity.[324]

The debate around the willingness and unwillingness to adopt technologies despite, and due to, their invasiveness has caught the attention of many scholars, and in recent years there have been numerous attempts to capture the complexity of people's relationship to

321 "Summary Report on the Data Subjects' Responses to the Questionnaire on the Implementation of Data Protection Directive", http://ec.europa.eu/justice/data-protection/index_en.htm (Accessed 22 Dec 2012).
322 Pavone, Vincenzo and Sara Degli Sposti, "Public assessment of new surveillance-oriented security technologies: Beyond the trade-off between privacy and security", *Public Understanding of Science*, 21 (5), 2012, pp. 556-572.
323 Gilliom, John and Torin Monahan, "Everyday surveillance", in Ball, Kirstie, Kevin Haggerty and David Lyon (eds.) *Routledge Handbook of Surveillance Studies*, Routledge, Oxon, 2012, pp. 410.
324 Galdon Clavell, Gemma, "CCTV in Spain. An empirical account of videosurveillance in a Southern-European country", *Information Polity*, 17 (1), p. 57-68.

surveillance and the instances of negotiation and resistance. Gilliom and Monahan,[325] for instance, describe instances of tax evasion in Greece, factory workers 'fiddling' with surveillance procedures to undermine control in Great Britain, or drivers installing radar and laser detectors to detect patrol cars. Taylor[326] mentions how students and their parents have taken action against CCTV in schools across the UK, and also describes how the negotiation of surveillance can entail a self-fulfilling prophecy in which the surveilled pupils interiorise the suspicion and mistrust directed at them and act accordingly. Lyon[327] talks of 'mobilizing responses' such as non-government groups and consumer movements organising protests and various responses to issues related to surveillance. Others explore the development of specific web tools to avoid tracking and thus resisting surveillance in web searches and in online interactions in general.[328] The activism of organisations such as Privacy International or The Electronic Privacy Information Center, indicates that resistance and negotiation occur not only at the 'experiencing' end but expand to the field of policy deliberation and the public debate. Finally, controversies around the 'abuse' of the trade-off approach are more and more common, where corporations change the 'Terms and Conditions' for certain products, increasing their power to unilaterally surveil customers, and are faced with an uproar from their clients and the media, forcing them to backtrack.[329]

However, as McCahill and Finn mention, 'despite the development [in surveillance studies] we know very little about people's experience of surveillance'.[330] This means that we still lack specific data on how instances of resistance and negotiation occur. Their research explores how different social groups experience and respond to being monitored by 'new surveillance' technologies used in the context of policing and criminal justice. They interview different social groups (school children, political protestors, persistent offenders, unemployed people, global migrants, and police officers), and find out that different groups experience surveillance in different ways –they 'negotiate' their relationship to surveillance technologies in different ways, and in doing so, they shape surveillance practices and technologies in novel and unanticipated ways.

This leads the authors to establish different categories of resistance when dealing with surveillance technologies: 'everyday politics of resistance' (blocking surveillance through the use of clothing, fooling drug tests, colluding with the surveyors); 'counter surveillance' (filming police officers at demonstrations, using mobile phones to film private security officers, creating 'anti-school' websites); 'mocking surveillance'(mocking or goading the authorities…); 'capital and resistance' (privileged groups use their social connections, financial resources, and education/knowledge to negotiate, evade and resist surveillance); 'ambiguities in surveillance' (marginalised groups try to evade surveillance by pulling down caps, throwing bricks at cameras, challenging authority figures); 'planning for surveillance'

325 Gilliom, John and Torin Monahan, "Everyday surveillance", in Ball, Kirstie, Kevin Haggerty and David Lyon (eds.) *Routledge Handbook of Surveillance Studies,* Routledge, Oxon, pp. 405-411.
326 Taylor, Emmeline, "I spy with my Little eye: the use of CCTV in schools and the impact on privacy", *The Sociological Review*, 58 (3), pp. 381-405.
327 Lyon, David, "Everyday surveillance. Personal data and social classifications", *Information, Communication & Society*, 5 (2), pp. 242-257.
328 Howe, Daniel C. and Helen Nissenbaum, "TrackMeNot: Resisting Surveillance in Web Search", in Kess, Ian, Carole Lucock and Valerie Steeves (eds.) *On the Identity Trail: Privacy, Anonymity and Identity in a Networked Society*, Oxford University Press, Oxford, 2012.
329 For a recent example, see the case of Instagram: http://www.rogerclarke.com/DV/PrivCorp.html#Instagram (Accessed 22 December 2012).
330 McCahill, Mike and Rachel Finn, "The Social Impact of 'New Surveillance' Technologies: An Ethnographic Study of the Surveilled", Economic and Social Research Council, London, 2011.

(global migrants reading information about what can be taken on a plane, carrying a full set of documents, carrying police registration cards, political activists carrying copies of the Human Rights Act in demonstrations); 'using surveillance against surveillance' (marginalised groups and persistent offenders using power against power, keeping negative drug tests to show others they are clean, keeping text messages and consumer transactions to prove their whereabouts); and 'deflection' (respondents deflect surveillance on to others by arguing that surveillance should be targeted at 'them' and not 'us' - respectable citizens).

Other authors have explored some of these categories further. Gilliom and Monahan, for instance, explore everyday resistance to surveillance and define it as 'practices that are unorganised, not explicitly tied to broader ideological critiques, and originate from direct concerns in daily life', and yet they see them as 'still political in that [they] create a tacit challenge and introduce symbolic friction to existing systems of domination and control'.[331] In their understanding, everyday surveillance is one of the two main categories of resistance - the other one being 'anti-surveillance' and including litigation and organised protests and uprisings.

Gary T. Marx, in turn, explores the instances of resistance to surveillance by focusing on what he calls 'neutralization' techniques –'strategic moves by which subjects of surveillance seek to subvert the collection of personal information such as direct refusal, discovery, avoidance, switching, distorting, counter-surveillance, cooperation, blocking and masking'.[332] While we do not have the space here to enter into the overlap between the two categorisations reproduced so far, Marx emphasises an interesting notion –'counter-neutralization moves', and the idea that resistance and negotiation also shape surveillance practices. While different authors have shown that different social groups develop different ways of negotiation and resistance (children vs. teachers, affluent citizens vs. deprived families, etc.), those who do the watching also play a role in the negotiation. In the case of CCTV operators, for instance, Norris and Armstrong have shown that 'the power of CCTV operators is highly discretionary as they have extraordinary latitude in determining who will be watched, for how long and whether to initiate deployment'.[333] This produces different reactions on all other actors involved, and shows that resistance and negotiation are highly contingent on pre-existing assumptions and power dynamics.

One of the terms most often used in the surveillance literature to explore resistance and negotiation, however, is counter-surveillance. For some authors, "counter-surveillance can include disabling or destroying surveillance cameras, mapping paths of least surveillance and disseminating that information over the Internet, employing video cameras to monitor sanctioned surveillance systems and their personnel, or staging public plays to draw attention to the prevalence of surveillance in society".[334] Others, however, establish differences between certain practices, distinguishing between "opposing surveillance" and "organizing counter surveillance": "avoiding images versus creating images". "Opposing surveillance includes hiding from it in one way or another, demanding tighter regulation, as well as

331 Gilliom, John and Torin Monahan, "Everyday surveillance", in Ball, Kirstie, Kevin Haggerty and David Lyon (eds.) *Routledge Handbook of Surveillance Studies,* Routledge, Oxon, 2012, pp. 405.
332 Marx, Gary T., "'Your Papers Please': personal and proffesional encounters with surveillance", in Ball, Kirstie, Kevin Haggerty and David Lyon (eds.) *Routledge Handbook of Surveillance Studies,* Routledge, Oxon, p. xxvi.
333 Norris, Clive and Gary Armstrong, "CCTV and the Social Structuring of Surveillance". *Crime Prevention Studies* 10, p. 175.
334 Monahan, Torin, "Counter-surveillance as Political Intervention?", *Social Semiotics* 16 (4), 2006, p. 515.

organising 'surveillance free zones'. (...) Counter surveillance is another type of activism that takes place to criticise surveillance". It is about "turning those same tools against the oppressors".[335] For others, still, counter surveillance is the act of "turning the tables and surveilling those who are doing the surveillance", a practice made possible by the "democratization of surveillance", but different from "refusal", "masking", "distorting" and "avoidance", among others.[336]

The boundaries between surveillance and practices of resistance, thus, are not clear. And the blurring gets even more complex if we add to the mix the concept of sousveillance, which Mann defined as "inversed surveillance" or "watchful vigilance from underneath" involving "a peer to peer approach that decentralizes observation to produce transparency in all directions" and "reverse the otherwise one-sided Panoptic gaze".[337] The same author differentiates between "inband sousveillance/subveillance" ("arising from within the organization") and "out-of-band sousveillance" ("often unwelcome by the organization" and/or "necessary when inband sousveillance fails"). He is also responsible for coining the terms "equiveillance", which aims to find "equilibrium" between surveillance and sousveillance and introduce issues of power and respect in the discussion,[338] and "coveillance", defined by some as "participatory" or "multicultural" surveillance.[339]

The proliferation of terms and categories shows, on the one hand, that resistance and negotiation occur and that it is found in many of the studies carried out by authors in the field; while on the other, there is still some difficulty in taking stock of the specific aspects that such practices entail. This is especially true when empowerment and positive understandings of surveillance clash with the 'surveillance as threat' approach that dominates the field, ignoring surveillance in other settings for goals involving protection, management, documentation, strategic planning, ritual or entertainment - thus focusing on a very narrow understanding of resistance and negotiation. As Ellerbrok[340] mentions, some authors "argue that perhaps surveillance technologies are not always necessarily exploitive, but instead might be viewed as empowering those who use them". In his analysis of the virtual networks, specifically Facebook, the author explains that often the relation between empowerment and disempowerment regarding surveillance practices is presented in terms of a dichotomy, where less of one implies more of the other. That would mean to understand or conceptualise negotiation over surveillance practices in terms of competitiveness (game of zero sums). The author suggests that in order to tackle this debate, there is a need to take into account all the levels of visibility when using these technologies for the analysis, as these levels of visibility are responsible for creating complex dynamics and facilitate combined experiences of empowerment and disempowerment.

335 Koskela, Hille, "Webcams, TV Shows and Mobile Phones: Empowering Exhibitionism", *Surveillance & Society* 2 (2/3), 2004, p. 205.
336 Mann, Steve, "A Tack in the Shoe: Neutralizing and Resisting the New Surveillance", *Journal of Social Issues* 59 (2), 2003, pp. 369-390.
337 Mann, Steve (2006) "Cyborglogging with Camera Phones: Steps toward Equiveillance", in *Proceedings of the ACM Multimedia*, pp. 177-180.
338 Mann, Steve, "'Sousveillance': inverse surveillance in multimedia imaging", in *Proceedings of the ACM Multimedia*, 2004, p. 627.
339 Kernerman, Gerald, *Multicultural Nationalism. Civilizing Difference, Constituting Community*. Vancouver: UBC Press, 2005.
340 Ellerbrok, Ariane, "Empowerment: Analysing Technologies of Multiple Variable Visibility". *Surveillance & Society*, 8 (2), 2010, pp. 200-220.

This is in tune with what the special issue on "Surveillance and Resistance" of the journal *Surveillance and Society* published in 2009, where guest editors Laura Huey and Luis A. Fernandez stated that "the notion of 'surveillance as a threat' is firmly entrenched in the public imagination",[341] identifying this as one of the main trends in the popular understanding of surveillance. Similarly, Dupont[342] has addressed the "neglect" of the new spaces between "those who watch and those who are being watched" created by the "democratization of surveillance", reinforcing Marx's claims about the determinism and narrow focus of most surveillance scholars, who "frequently present what may happen as what will happen, obscuring the mechanisms that so often derail the best plans".

Therefore, while there is a need to come up with more complex understandings of surveillance, resistance and negotiation, the limits to resistance are a factor that needs to be taken into account when exploring the surveillance society and the possibilities to resist it. As Murakami Wood[343] stresses, 'individuals are seriously at a disadvantage in controlling the effects of surveillance', because even though there are legal provisions that should protect people's rights and allow them to control how their data is used by surveillance practices, when surveillance is "infrastructural" the possibility to choose one's exposure to surveillance (or indeed to choose to live "outside" of the surveillance society) is limited - at best. It is widely recognised, for instance, that most people don't read the Terms and Conditions of many of the services they use,[344] and are therefore unaware of the extent of the surveillance capabilities of many services and applications. Also, in all cases "opting out" means agreeing not to have access to a particular application. Therefore, as the same author emphasises, 'the emergence of today's surveillance society demands that we shift from self-protection of privacy to the accountability of data-handlers',[345] thus acknowledging that the scope and possibilities of resistance and negotiation, and of individual choice, are currently limited by the proliferation of surveillance technologies in a legal and social context that has not yet fully taken account of the risks involved in this process nor the need to enact sufficient legal safeguards and policy responses to the more invasive and unaccountable aspects of the surveillance society.

1.8 CONCLUSIONS

The social perspective on surveillance explored here complements the political and legal perspectives set out in IRISS Deliverables 2.2 and 2.3. It also overlaps with them, in the sense that political and legal processes are a fundamental part of modern society and shape the nature of society, and because social, political, and legal processes intertwine to shape social experiences and the nature of democracy. The focus of the social perspective on

341 Fernandez, Luis A. and Laura Huey, "Is Resistance Futile: Thoughts on Resisting Surveillance", *Surveillance & Society* 6 (3), 2009, p. 198.
342 Dupont, Benoît, "Hacjing the Panopticon: Distributed Online Surveillance and Resistance", in *Surveillance and Governance, Sociology of Crime Law and Deviance* 10, 2008, p. 259.
343 Murakami Wood, David, "A Reporto on the Surveillance Society", London, Information commissioner, 2006, p. 7.
344 See, inter alia, Bakos, Yannis, Florencia Marotta-Wurgler and David R. Trossen, "Does Anyone Read the Fine Print? Testing a Law and Economics Approach to Standard Form Contracts", *CELS 2009 4th Annual Conference on Empirical Legal Studies Paper*, 2009.
345 Íbid, p. 8.

surveillance and democracy, as set out in this Deliverable, examines the social implications and consequences of technologically mediated surveillance systems and practices. At the heart of this perspective is a recognition that surveillance technologies interact with and shape (and are shaped by) societal structures, institutions and relationships. The focus of the social perspective is therefore 'the social', how humans interact and relate to one another and with new technology. Included within this perspective are approaches which consider changing societal values, such as security, trust and privacy, changing social behaviour, criminological approaches that address feelings of fear and insecurity, and how all these have changed over time in different democratic settings. The social perspective also considers the ways in which people and groups in society experience surveillance and how they can and have resisted surveillance over time. The underlying theme emerging from this perspective is that surveillance, mediated by new technology, is increasingly embedded in the fabric of society, and as such shapes and is shaped by social relations and structures.

A few main themes emerge from the social perspective. These are as follows:

1. Surveillance has become a normal part of everyday life and it is entrenched in the social fabric of life. This is manifest in the way we perceive, use and react to surveillance technologies. Surveillance technologies therefore shape our socio-economic relations, our relationships with each other, relationships between the state and its citizens, our reality and our life chances.

2. Surveillance technologies influence and shape human behaviour and can therefore be seen as tools and practices for social control and social exclusion. Surveillance represents a disproportionate power relationship between the surveyor and the surveyed. The relationship is unequal and affords the surveyor more power. Surveillance technologies are embedded in and reinforce existing power relations in society, especially, but not exclusively, citizen-state relations.

3. Surveillance has predominantly been understood as a technique (a set of tools and practices) to combat and deter criminal and other undesirable behaviour. Surveillance technologies are regularly deployed in security settings and the dominant discourse about their purpose and impacts relates to their security function, and their use in alleviating public fears and insecurities.

4. The diffusion of surveillance technologies and associated practices is interlinked with evolving social values. The development of both is intertwined and they are evolving together. In particular, our attitudes towards trust, privacy and identity are evolving alongside the use of surveillance technologies.

5. Surveillance, mediated by new information and communication technologies, generates huge amounts of information about individuals, groups and trends in society. This information is valuable and is used to shape the production of goods and services.

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