The London School of Economics and Political Science

Making Situated Police Practice Visible: A study examining professional activity for the maintenance of social control with video data from the field

Johannes Christian Rieken

A thesis submitted to the Department of Methodology of the London School of Economics and Political Science for the degree of Doctor of Philosophy, London, May 2013

Declaration

I certify that the thesis I have presented for examination for the MPhil/PhD degree of the London School of Economics and Political Science is solely my own work other than where I have clearly indicated that it is the work of others (in which case the extent of any work carried out jointly by me and any other person is clearly identified in it).

The copyright of this thesis rests with the author. Quotation from it is permitted, provided that full acknowledgement is made. This thesis may not be reproduced without my prior written consent.

I warrant that this authorisation does not, to the best of my belief, infringe the rights of any third party.

I declare that my thesis consists of 83 524 words.

Statement of conjoint work

I confirm that Chapter 5 was jointly co-authored with Professor Saadi Lahlou and I contributed 60% of this work.

Statement of use of third party for editorial help

I can confirm that my thesis was copy edited for conventions of language, spelling and grammar by the LSE Language Centre.

Abstract

This PhD studies the professional practice of policing from a situated perspective. It explores with social psychological theories and methods how officers attend to incidents, showing that discretion exists within the ambiguity of a concrete situation that an officer interprets then and there. With Body-Worn Video (BWV), a head-mounted camera introduced into UK policing in 2007, officers record as part of their practice. Within the framework of Subjective Evidence-Based Ethnography (SEBE) (Lahlou, 2011) self-confrontation interviews of officers with their recordings allow insights into situated decision-making processes. I also became a Special Constable to train as an officer and organised a working group of police on the use of video, to gain insight into institutional factors. Hence, video use in policing is both an object of study and enabler of methodological innovation for this work. The empirical material is analysed to explore the interplay of institutions with concrete situations as displayed in officer recorded footage, focusing in particular on affordances (Gibson, 1986), connotations of action (Uexküll, 1956), sequential dimension (Knoblauch et al., 2006, Sacks et al., 1974) and social encounters (Goffman, 1961). The PhD develops 3 papers. Paper 1 focuses on discretion: crucial to the policing of an incident is whether it is pursued formally or informally. This categorisation occurs in a process where officers anticipate formal outcomes. They therefore often have discretion to construct an incident as warranting a formal response or not. So officers frame the situation as well as respond to it. Paper 2 expands on the formal/informal distinction to consider the trade-offs they have to make under cross constraints. Being able to simultaneously maintain an appearance of control (Manning, 1977), adherence to due process, and attend to situational demands is only possible because officers have discretion in the process of co-constructing an incident in the 'correct' formats. Paper 3 discusses the relevance of seeing and visibility for policing. It also explores the impact of camera-mediated visibility on officer practice, therefore, addressing the implications of increasing visibility on policing and the biases resulting from using BWV as data for research. As the emphasis on appearance grows, officers lose the discretion that comes as part of interpreting a situation, forcing them to be more mechanistic in how they police incidents.

Acknowledgements

Completing this PhD would not have been possible without the help of many others. So many that I am bound to forget to give credit here to several that equally deserve it.

Professor Saadi Lahlou has been a great supervisor; guiding me through the PhD experience and making sure I stayed on track for at least most of that journey. There are also several other academics that have provided crucial feedback and advice including my second supervisor Professor Jon Jackson, members of my upgrading committee Professor Jennifer Brown (Mannheim Centre of Criminology) and Professor Nigel Fielding (Surrey University) and viva committee Professor Aaron Cicourel and Professor Robert Reiner. Dr. Sophie Le Bellu (Ecole Nationale Superieure de Cognitique, Polytechnic Institute of Bordeaux), Professor Carey Jewitt (Institute of Education), Professor Joshua Phelps (Norwegian Police University College) and Dr. Paul Quinton (College of Policing) also kindly provided feedback on drafts of this work. Sheila Blankfield and Professor Cathy Campbell have helped me particularly with structuring my thoughts and putting them on paper. Steve Bennett and Steve Gaskell have continuously provided essential help when it came to recording and managing video files.

At the very core of this research are the police officers that permitted me to see their footage and allowed me to interview them. While I cannot name them here I am very grateful that they shared their perspectives with me. PC Joe Garnett, PC Anthony Lewis-Webber, Assistant Commissioner Richard M. Bennett and Professor Betsy Stanko have been crucial to gain access and organize these interviews. I am also grateful to members of the LSE Working Group on BVW for vivid exchanges and insights on the technology, particularly Superintendent Neil McGuinness-Smith (NPIA), Inspector Tanya Sillett (Surrey Police), Mark Lyell (Queensland Police Service), Colin Newmarch (Dartford Council) and Catherine Troup (Thames Valley Police).

Daniel Bear, Andrea Gobbo and Matthew Willis have become dear friends during my training at LSE and important sounding boards for trying out and developing the ideas that form this PhD. My family and friends Anke Rieken, Wiebke Bohn, Wolfgang Bohn, Harald Müller, Jan Nassrallah and Mira Shibaru helped me to maintain perspective, energy and motivation throughout this journey. For that, and much more, I love them very much.

This work has been supported financially by the Hans-Böckler Stiftung and the ESRC.

Table of Contents

LIST OF TABLES
LIST OF IMAGES9
LIST OF ACRONYMS 10
1. INTRODUCTION
2. THEORY AND LITERATURE REVIEW
2.1. POLICING
2.1.1. Policing as a Social Practice
2.1.2. Policing and Technology Induced Change25
2.1.3. Policing and Surveillance
2.1.4. Policing and Discretion
2.2. Theoretical and Methodological Framework
2.2.1. Theoretical Framework: Situated Research
2.3. CONCLUSION
3. METHODS AND MATERIALS 44
3.1. Core Methods and Materials
3.1.1. Subjective Evidence-Based Ethnography47
3.1.2. SEBE Data
3.2. Contextualising Methods and Materials
3.2.1. BWV expert group
3.2.2 Analysis of policy papers
3.2.3. Special Constable
3.3. TRIANGULATION AND COMMUNICATIVE VALIDATION
3.4. LIMITATIONS AND CRITICISM
3.5. Research Ethics
3.6. CONCLUSION
4. FIRST EMPIRICAL PAPER ON DISCRETION AND SEQUENCE
4.1. INTRODUCTION
4.2. PAPER: SITUATING POLICE DISCRETION AND TEMPORAL PROGRESSION – USING VIDEO-BASED METHODOLOGY TO
UNDERSTAND HOW POLICE OFFICERS TRANSLATE 'MESSY' SOCIAL SITUATIONS INTO ACTIONABLE INCIDENTS
4.2.1. Police discretion
4.2.2. Theoretical and Methodological Framework117
4.2.3. Methods and Materials

4.2.4. Results	122
4.2.5. Conclusion	135
Appendix First Paper: Coding Frame	138
4.3. LINKING STATEMENT FIRST PAPER	141
5. SECOND EMPIRICAL PAPER ON COMPETING DEMANDS	143
5.1. INTRODUCTION	143
5.2. PAPER: SITUATED POLICE OFFICER ACTIVITY AND CROSS-CONSTRAINTS: AN ANALYSIS OF VIDEO DATA O	f Police
PRACTICE IN THE FIELD	144
5.2.1. Theoretical Background	146
5.2.2. Method and Material	151
5.2.3. Findings	157
5.2.4. Discussion: Handling cross-constraints	176
5.2.5. Conclusion	181
5.3. Linking Statement Second Paper	183
6. THIRD EMPIRICAL PAPER ON DIGITALLY MEDIATED SEEING AND VISIBILITY	186
6.1. INTRODUCTION	186
6.2. Paper: The Effect of (Camera Mediated) Seeing and (New) Visibility on Policing Practice	187
6.2.1. Theoretical Background	188
6.2.2. Methods and Materials	193
6.2.3. Findings and Discussion	195
6.2.3. Conclusion: Issues created by New Visibility and potential responses	213
6. 3. Linking Statement Third Paper	214
7. CONCLUSION	216
7.1. How to <i>do</i> social control as a practice? – Social Psychological Contributions	217
7.2. How to do social control professionally – Criminological Contributions	221
7.3. Methodological Contribution	226
7.4. So what? – Relevance of the research for policy and practice	229
7.5. Оитlook	233
7.5.1. Areas to improve present research	233
7.5.2. Future research	235
REFERENCES	237
APPENDIX I. DETAILS OF KEY BWV DEVICES USED	263
APPENDIX II. REPORTS LSE WORKING GROUP ON BODY-WORN VIDEO	269
APPENDIX III. TOPIC GUIDE – INTERVIEW	276

APPENDIX IV. CODING FRAME	278
APPENDIX V. INFORMED CONSENT FORM	281
APPENDIX VI. TABLE OF SEBE DATA	282
APPENDIX VII. LIST OF OFFICERS	284
APPENDIX VIII. EXCERPT IPLDP QUICK NOTES ON STOP AND SEARCH	285

List of Tables

Table 1: Types of Incidents	. 76
Table 2: List of Debriefed Officers	. 77
Table 3: Field-Work Sampling Determinates	. 88
Table 4: Affiliations of LSE Working Group on BWV Members	. 91

List of Images

Image 1: BWV equipped officer (This image has been removed as the copyright i
owned by another organisation)12
Image 2: Separating (This image has been removed as the copyright is owned by
another organisation)127
Image 3: Welcomed in (This image has been removed as the copyright is owned by
another organisation)127
Image 4: Decision not to pursue offence144
Image 5: Interview and Replay Analysis 154
Image 6: Transana
Image 7: Duration and Progression of Stop and Search Procedure
Image 8: Position of the car164
Image 9: Knowing the Environment
Image 10: The impact of police presence on rule conformity
Image 11: Awareness of Effect of Own Presence on Public 199
Image 12: Arrest During Domestic Incident (This image has been removed as the
copyright is owned by another organisation)203
Image 13: Officer talks with kids about BWV device 207
Image 14: Officers signals that he sees and records (This image has been removed a
the copyright is owned by another organisation)
Image 15: Anti Scientology protest from officer and protester perspective (Thi
image has been removed as the copyright is owned by another organisation
Image 16: Officer aggravates by being polite (This image has been removed as the
copyright is owned by another organisation)212

List of Acronyms

ANT	Actor-Network Theory
AV	Audio-visual
BWV	Body-Worn Video
CLP	City of London Police
МОР	Member(s) of the Public
МТАР	Mindset Theory of Action Phases
NPIA	National Police Improvement Agency
PCSO	Police Community Support Officer
SC	Special Constable

1. Introduction

Efforts to analyse situated police practice struggled to capture the fine grain of police activity, this research provides new illumination on the subject. The practice of police officers is an important and much studied subject (Bittner, 2005, Holdaway, 1983, Manning, 1977). Policing warrants such continuous attention because it is a social practice that, as such, is evolving along with the communities policed (Banton, 1964). This research contributes to our understanding of officer practice by exploring its situated components (Greeno, 2006). New theories (Hutchins, 1995a, Lave, 1988) and methods (Lahlou, 2011a) developed outside criminology, allow us to study officers' situated cognitive processes in an unprecedented manner. This is practically implemented through video research using Body-Worn Video1 (BWV, see figure I.) a technical device introduced to UK Policing (Home-Office, 2007a, Home-Office, 2007b). Fittingly, video is currently also one of the drivers of changes in police practice resulting from 'New Visibility' (Goldsmith, 2010). Therefore, exploring how technological changes and their implications for surveillance (Mann et al., 2003, Goodwin, 1994) affect policing is in itself a social phenomenon explored in this research, taking it beyond being purely an exercise in methodological reflection.

Image 1: BWV equipped officer (This image has been removed as the copyright is owned by another organisation)

Chapter 2 reviews criminological and social psychological theory and literature in order to inform the substantive focus on policing and the theoretical framework that it is investigated in. With policing, this PhD focuses on the analysis of a concrete professional practice. Policing is a deeply social and often contested activity and as such it warrants analysis from many standpoints, including legal, political and wider societal perspectives. However, this research is consistent with its methodological framework (Lahlou, 2011a) that centres on the information available in Body-Worn Video (BWV) recordings, and approaches policing from a social psychological perspective. The focus is on how those practicing policing relate to their environment and what strategies and acts that relational process results in. The other mentioned

¹ After a first small trial that commenced in 2005, a larger pilot of the Devon and Cornwall Constabulary employed this technology in October 2006. In July 2007 the Home Office provided £3 million of funds for a national rollout of BWV (Home-Office, 2007a). A number of companies now provide such devices suitable for police (see Appendix I).

influences may still be considered in such an analysis but only to the extent to which they are relevant to and are acted upon by the practicing subjects. Hutchins (1995a) observed that during a moment of practice in the development of the practice itself, the development of the practitioners and the conduct of the activity come together in an environment that is equally shaped by and shapes the practice. This research aims to animate these interplays by asking: *What insight does a fine-grained analysis of first-person perspective audio-visual recording provide about police practice*?

We can expand step by step from this social psychological starting point in order to illustrate the manner in which this research approaches its subject. To this end, it is useful to relate a number of key terms and concepts that are central to this work. This is not to be understood as an effort to precisely define these concepts, but rather to broadly outline where this work originates in terms of conceptual ideas.

When we talk about *activity* as opposed to *behaviour* we indicate that we are interested not merely in the physical movement of an individual through *time* and *space*, but the *meaning* of these movements to the individual. This interest in activity above behaviour is reflected in the methods used; *self-confrontation* interviews (Cranach, 1982) conducted for the analysis of BWV recordings aim at obtaining the participants' *interpretation* of their own behaviour. However, the activity we are exploring is not isolated but rather is exercised within a community of practitioners (Wenger, 1998) that has values, goals and a refined 'routine ways of doing things'. We refer to such a socially embedded activity as *practice and as professional* practice when participants engage in it as means of livelihood.

When as a next step we specify the professional practice this research focuses on, we move from expanding theoretical social psychological concepts into the empirical realm, contextualising the object of the research and making it concrete. We also add a *criminological* research interest about the production of social control to the focus on human practices in intuitional, social and physical settings that are ordered by time. Finally, by specifying, we also acknowledge that any practice always develops in and creates a context and therefore cannot be studied outside that environment (Lave, 1988, Latour, 2005, Hutchins, 1995a). Therefore, when in this research we make claims about bringing new theory and methods to criminological research, the

reverse also holds true – we bring to life and make meaningful social psychological ideas by applying them to a real world professional practice.

A professional practice does not consist of ways of doing anything but of doing something specific. Further, the individuals 'doing' are not anybody but experts that are at least partly characterised by what they professionally do. Broadly speaking, the study of policing is the study of mechanisms of social control (Reiner, 2010). Therefore, policing is often used to highlight larger social processes, while police refers to a specific institution that is tasked with policing (Reiner and Newburn, 2008). In this work, however, when we use the term policing we still refer only to what officers do unless otherwise specified. Taking these observations together, we can state that we are investigating 'ways of doing social control' by officers. Not all officers but only uniformed officers out on the streets. They are societies 'standing reserve', immediately available to deal with situations that require policing (Bittner, 2005). They are either called to these situations and/or proactively search for them (Black and Reiss, 1967). In addition, these situations only occur in environments where people can act to create irregularities that require police attention, and in that sense they take place in public. Thus, we only capture one group of officers and a small component of the production of social control. However, this focus probably captures one of the most iconic and at the same time every-day mundane images of policing, 'the Bobby walking the beat'.

The description of the relationship between key concepts in this research also illuminates how they will be investigated. We are not going to provide a historical analysis of the British Bobby, of the legal governance of the police (Lustgarten, 1986) or survey how police are trusted or perceived by the public (Bradford, 2009). Rather, we are asking questions such as: How is policing (in the sense of 'what officers do in public') a function of the environment it occurs in? What is the relevance of the timing and sequencing of officer activity for policing? How do officers interpret their environment? How do they frame and evaluate encounters with members of the public? What strategies and routines have officers developed? In other words, we explore how professional policing interplays with the concrete situation; a concrete situation that will always be constituted of a *physical environment* with affordances (Gibson, 1967, von Uexküll, 1956) and will always have a *temporal dimension* that

gives acts a sequence (Knoblauch et al., 2006, Sacks et al., 1974). Blau's (1955, 1974) work on bureaucracy can here be used to highlight that we are focusing more on understanding the informal processes within a formal bureaucratic structure than such a structure itself. With this distinction Blau expanded on Weber's (1965) who arguably focused mainly on the formal aspects of bureaucratic structure. We agree with Blau that these are two related but distinct ways of studding the working of bureaucracy also require distinct approaches.

Further, the situations we focus on always present *social encounters* (Goffman, 1961) between officers and members of the public that certainly, for the officer, evoke organisational guidance and legal requirements (*institutions*). Linking this again to the used methodological framework of Subjective Evidence-Based Ethnography (SEBE), the physical and time dimension is captured by BWV, as video is a multi-modal and real-time sequential data format (Knoblauch et al., 2006). However, we only gain an understanding of the nature of the encounter and the relevant institutional norms in these situations by interviewing the professional officers that have recorded the BWV footage (self-confrontation).

That the research is enabled by BWV, which is secondary data that results from new processes in policing, intersects in two ways with the agenda of this research. Firstly, in terms of sampling, the situations that are explored are at least partly determined by these organisational processes. Secondly, therefore, reflections about the data used in this research do not only have methodological relevance, but also have the potential to provide insight about the new processes in policing that the BWV data originates from. It is because of these interconnections that as a second research question we explore *how the introduction of visibility increasing technology such as BWV impacts policing*? To this end we study the relevance of seeing and visibility as strategies of policing. Only then are we in a position to examine if and how visibility and seeing changes through video technology such as BWV. However, in line with our social psychological approach we will not examine such technology as isolated physical objects, but also consider the associated practices, norms and conventions that develop alongside any new technology and guide its use (Latour, 2005). In their totality we refer to these changes as New Visibility (Thompson, 2005). We illustrate

how an appreciation of these changes allows an examination of the impact of increased availability of video technologies on policing.

Chapter 3 elaborates on the methods and material used in this research. This work is submitted as requirement for a PhD in Social Research Methods. Therefore, while the theoretical consideration underlying the choice of the methodological approach has already been outlined in the preceding chapter, the methods used and how they relate are discussed in detail in this section. This research takes the position that situational and subjective sense-making processes as drivers of policing practice in concrete situations are best explored with SEBE as a core method within a larger mixed method research framework. The SEBE component itself is introduced as an innovative addition to the repertoire of methods currently used in policing research such as experiments, interviews, surveys and different observational methods. For the SEBE component, a sample of 28 incidents recorded with BWV was gathered from across 4 British police forces. These were used for debriefing interviews with 18 officers conducted between 2009 and 2013. The BWV recorded incidents cover a range of situations with stop and search and domestic incidents prevailing. The interviewed officers are active frontline police officers of the lower ranks (PCSOs, constables and sergeants) from both Safer Neighbourhood and Response teams.

To contextualise the SEBE data, three more forms of data were collected. A different method of collection and analysis was used for each of them. The first type of contextualising data is the use of an (1) expert focus group. The researcher five times facilitated discussions of a diverse group of BWV experts. The group included frontline users, BWV coordinators and prosecutors (users of BWV as evidence) from different regions. The discussions this group had were documented and informed this research. The second type of contextualising method was (2) desk research. For this purpose, expert group members provided access to relevant material such as policy papers, reports and user guidelines concerning BWV. This allowed the researcher to appreciate the guidelines and regulations under which officers use BWV. Finally, the researcher also conducted (3) classical ethnographic research and became a Special Constable. He trained the month of October 2012 to become a fully warranted officer in November 2012 and has since volunteered as a police officer about twice a month. The researcher did not get the opportunity to directly use BWV devices in his capacity

as Special Constable. Nonetheless, experiences of practicing as a police officer also enabled the researcher to better notice and interpret police practices captured on BWV recordings.

This is a paper-based PhD; therefore, three draft papers are the main component of the substantive empirical chapters, which are chapters 4, 5 and 6. The three papers all pursue the above outlined research agenda and are informed by the same empirical research but also stand as independent papers. Some overlap and repetition, particularly in their methods sections, can therefore not be avoided. However, the papers also present the continuous exploration of a larger argument about the mouldable nature of formal discretion that is counterbalanced by the constraints on officer practice provided by the concrete situation and how that balance may be jeopardized by the increasing camera mediated visibility of the police.

The first two papers relate mostly to the first RQ, about the exploration of police practice, while the third paper is mostly relevant to the second RQ, about the impact of video technologies on policing. In the first paper we explore how formalised institutions in the form of legislation and organisational guidance are integrated with concrete policed situations. We suggest that duly considering the temporal dimension in this process illuminates how some policed situations become formally recognised incidents while others are dealt with informally, a process that we argue is at the root of officers' use of discretion. In the second paper we examine the interplay of the institutional, physical and the social dimensions of a policed situation that officers have to consider in their practice. In doing so we illustrate that judging the quality of policing requires an in-depth understanding of the concrete situation and the compromises officers have to make between competing goals. We propose that a stark discrepancy between the public and the police in their appreciation of these factors is widespread. In the third paper, we explore the relevance of seeing and visibility, as two sides of one perceptual exchange, for policing. We suggest that officers see things in a manner that is shaped by their profession. We then argue that New Visibility makes this Professional Vision (Goodwin, 1994) particularly apparent to the public, a development that may make the differences in the evaluation of policing between MOP and the police, illustrated in the second paper, even more salient. We conclude

by exploring coping strategies MOP, but particularly officers, may develop in response to these developments.

Chapter 7 is the concluding chapter. It summarises the work, highlighting contributions to social psychology, criminology and methodology. It also address the 'so what?' question to explore the real-world relevance of the research. In this effort the potential of the research to inform policy for the introduction of BWV-like technology to policing is discussed, as well as the potential to use BWV recordings for officer training. Finally, the chapter provides reflections about potential areas for improvement of the presented work and considerations for future research.

2. Theory and Literature Review

What insight does a fine-grained analysis of first-person perspective audio-visual recording provide about public police practice? This is the central question of this research. In order to address it we firstly explore the criminological literature on street-level policing practice. This is followed by using the second research question 'How does the introduction of visibility increasing technology such as BWV impact policing?' to learn more about the ways in which policing practice is modified by the increased visibility of the police using BWV. The focus in the literature review on technology-induced change and the effect surveillance has on policing will contextualise the second question. Further, the literature on officers' use of discretion is presented to demonstrate the limitations of current criminological research in understating situated decision making by officers. In order to address these limitations, the 'situated program' (a framework to conceptualise professional knowledge in context) is introduced. In addition, the merits of video research and particularly Subjective Evidence-Based Ethnography (SEBE) are discussed as a methodological approach that lends itself to the study of situated policing practice.

2.1. Policing

This research focuses on experiential and cognitive aspects of what it means to professionally police incidents on the ground. Much criminological research focuses on what officers *do*. What follows is a review of some of the most relevant research on policing as a social practice. This will theoretically underpin the first question in this research: What insight does a fine-grained analysis of first-person perspective audio-visual recording (BWV footage) provide about public police practice? Policing as a Social Practice outlines the substantive basis of this research. The next two subsections address special aspects of policing of particular relevance to the theoretical framework and the resulting methodology of this research. The literature on Policing and Technology Induced Change is explored because BWV (the technology used by this research to obtain data about police practice) does in itself have the potential to be such a practice changing technology. Academic work on

Policing and Surveillance is presented because BWV is a new surveillance technology used by officers. The last subsection, Policing and Discretion, highlights the research gap addressed by this work and marks the connection to the research theoretical framework and methodology. The literature on officers' use of discretion approximates most closely to officer decision making in this context however, this research will contribute to this strand of research by integrating identified factors for the use of discretion in a manner that also appreciates situated cognitive and temporal processes.

2.1.1. Policing as a Social Practice

A key focus of this research is on practices, officers' observed behaviour and how these are interconnected with the concrete situation at hand. Therefore, the interest is on what officers actually do not only prescribe as an activity. The premise is that policing is as much about making sense of and negotiating the demands of the concrete situation as it is about abstract law and the governance of the Police. There is a strong tradition of criminological research that appreciates policing in that manner as a social practice, and in the following some of it is going to be outlined.

Skolnick (1966) makes the point that officers are better understood as craftsman rather than bureaucrats. They develop skills for handling their social environment by learning from colleagues and practice. Consequently, it is put forward that an occupational culture is essential for understanding police activity. However, his ethnographic work with the police is not clear as to his sampling and what he viewed as 'data'. But it resonates with literature on situated approaches that will be explored in the following sections. Cain (1973) combines observation and survey material to explore differences in rural and urban UK police forces. She finds that rural officers are usually exposed to a tight-knit web of community norms and values while urban officers can more easily choose not to live in the already more heterogenic communities they police. Thus, rural officers more often take on the values of the community they police than their urban counterparts. Cain further argues that because there is more specialisation in urban policing, the officer's view of the community is often skewed by their professional function. To illustrate, based on Cain's observation we may argue that a response team officer may have a different perspective on the

public than an officer on a safer neighbourhood team. While Westley (1970) conducted interview based and not observational research in a small town in the United States, he still focused on bottom-up interpretations of regulation and experiences of officers on the street. Westley explains aggressive police behaviour with the claim that officers are usually confronted with the 'evil side' of the public. Therefore, it is argued that they protect themselves by keeping a distance and maintaining a readiness to fight. These studies help to demonstrate the need for continuous empirical validation in order to understand the phenomena of policing. Officers develop distinct practices over time in relation to the context in which they police. The research literature further points to the fact that policing, while a practice exercised by individual police officers, is in fact inherently social. Thereby the usefulness of a Social Psychological framework for the study of policing is apparent. However if we grant that police activity is framed by an occupational culture, empirical details about this culture are often provided in somewhat abstract terms. This may be because studies where the researcher underwent training to become a police officer or can draw on personal experience of being an officer before becoming an academic directly are scares. They include Holdaway's work on police and ethnic minority relations (Holdaway, 1983) and Van Maanen's writing on officers' socialisation processes (Van Maanen, 1972).

There are a number of eminent researchers in the field who take the social nature of policing on board to develop explanations for police activity. Three prominent examples are Manning, Bittner and Waddington. Their perspectives are detailed below.

Manning's work builds on Goffman's research on the representation of the self (Goffman, 1958, Goffman, 1961, Goffman, 1967). Manning (1977) develops the notion of a dramaturgical sociology of policing. According to him, the dilemma of the police is that they seek public confidence, but they cannot evidence that they are successful with their mission of public control. He goes on to argue that consequently, the police dramatise the appearance of control, they manage the information available to judge their success and they seek to establish an appearance of a unity of purpose. Thus, his main thesis is that the police establish their authority and legitimacy by employing strategies that are also used in interpersonal communication as identified

by Goffman. That such management of appearance is likely to become increasingly difficult with the 'new visibility of policing' (Goldsmith, 2010) was already indicated in the introduction. The widespread availability of mobile recording devices, increased 'citizen journalism' and online outlets for these accounts made it much more likely that, at any point, police activity is made widely visible. However 'low visibility' that used to be an inherent character of much of street level police work (Chatterton, 1983) is crucial for lower ranks to be able to exercise discretion (Chatterton, 1989).

Bittner (Bittner, 2005, Bittner, 1967, Bittner and Bish, 1975) points out that actual crime-fighting is only a fraction of what the police do, and what actually characterises their activity is their authority and ability to coerce using force. He points out that this ability to threaten force is often enough to control a situation. Therefore, the 'craft of effective policing is to use the background possibility of legitimate coercion so skilfully that it does not need to be foregrounded' (Reiner, 2013 p.166). The Police are therefore in the unique position of being able to impose immediate solutions to the constant flow of small conflicts, irregularities and problems that need to be dealt with in society: Whenever there is 'something-that-ought-not-to-be-happening-and-aboutwhich-someone-had-better-do-something-now!' (Bittner 2005, p.161), it is a task for the Police. Certainly there are a number of other emergency services that may also respond but central to this argument is that the Police have the most general mandate of them. Therefore, if an incident does not specifically fall into the remit of any of the other services it ends up with the Police by default. From this perspective, we understand that there is hardly anything that an officer will not have to deal with at some point. The present research will illustrate some of the local adaptations of police practice present in the investigated police forces.

The relationship between the Police and the public is partly characterised by efforts on the side of the Police to reaffirm their power and their ability to exercise this power to varying degrees. According to Waddington, much of what the Police do is to reaffirm their power. Waddington (1999b) conceptualises policing as the exercise of force by the State in order to protect its interests. From this perspective, patrolling should be understood as asserting authority over territory (Walker, 1996). In democracies, this right in turn, creates an intriguing dynamic in the relationship between the Police and the individuals that are policed. Towards citizens, the exercise of force is limited and heavily restricted with officers spending a great deal of time creating paper trails in order to be able to justify their actions. For example, protesters exercise a civil right and are to be treated differently from rioters. However, what constitutes a riot and what is legitimate protest is open to interpretation and likely to change over time. In that sense 'citizenship' is not only a legally and politically informed notion but also about social power. Citizens are at the core of society vocal, aware of their rights and with the resources available to defend their rights when contested. From the perspective of societ power we may therefore contrast citizens with 'police property' those groups of society that are left by the power full groups in a society to be dealt with by the police and therefore disproportionally often come to be at the receiving end of police powers (Reiner, 2009).

Thus, Waddington concludes that the Police patrol the 'boundaries of respectability' (Waddington, 1999b, Waddington, 1999a). Arguably, it is exactly for this reason that public order police actions consistently divide public opinion about the extent to which they are justified. Following Waddington's logic, the legitimacy of policed protest needs to be contested in society, otherwise, these protests are unlikely to become the object of policing to begin with. To illustrate this dilemma, the protest against a major construction project in Stuttgart, Germany was overwhelmingly perceived as conducted by 'respectable citizens'. However, officers were ordered to employ force. Consequently, officers report that the protest was difficult to manage because they felt as though they were turning against the public that they felt they should have been protecting (Cadenbach and Fellmann, 2011).

Waddington's work is also interesting as he provides a detailed micro level analysis of public order encounters mostly from the perspective of higher-ranking officers (Waddington, 1994). He points to the complexities involved in understanding police activity as such activity is embedded in a variety of legal and institutional frameworks (Ericson, 2007). These become relevant or silent depending on the circumstances. A prominent large-scale observational study on frontline police behaviour was conducted by Black and Reiss in the 1960's (Black and Reiss, 1967), followed by research on a smaller scale such as Fielding's work (Fielding, 2013). These provide fine-grained accounts of the determinants of police practice. However, while

observational ethnographic research is widespread in police research, the kind of detailed observational research of Black and Reiss also allows the statistical analysis of observational data because of its scale, and are the exception. This is likely to be the case because they are difficult to conduct. These studies require researchers to continuously make coding decisions about the situational factors that impact upon officer behaviour on the spot. They do not have the possibility to revise a situation again to control their judgement. The research at hand aims to foster this research tradition by using video material which precisely addresses this difficulty and enables a repeated analysis of even very minute aspects of police practice. Video research by Waddington already explores perception in public police interaction from the perspective of civilians (Wolverhampton-University, 2009) and as such, it can provide a useful counterpart to the research at hand that focuses more on the perspective of officers.

It has been shown that a constructive public police relationship is dependent on procedural justice. As the name already suggests, the procedural justice model suggests that, the MOP during interaction with the Police, often hold procedural variables such as fair, decent and honourable treatment above concerns about the judicial outcomes that distributive, restorative or retributive conceptualisations of justice focus on. This research aims to identify actual police practices used on the ground that are procedurally just. The procedural justice model (Tyler, 1990, Bradford et al., 2009, Jackson and Sunshine, 2007, Sunshine and Tyler, 2003) helps to further unpack the relationship between the Police and the public and in doing so the construction of police. One of the main theses of this model is that in particular, members of the public who have had direct contact with officers form their own judgements about the legitimacy of the police based on the perceived fairness or procedural justice of their treatment. 'Procedural justice is marked and demonstrated by transparency, fair, equitable and respectful treatment, and a feeling of control ... among the public over the processes through which they are being treated' (Bradford, 2009 p. 37).

Tyler employing a panel survey shows that the public perception of the legitimacy of police activity is the best predictor of cooperation (Tyler and Huo, 2002, Sunshine and Tyler, 2003). Perception of legitimacy is a function of the style of policing (Tyler,

1990). With this model, rather than focusing on the quality of the outcome of police activity, the perceived fairness of the activity is the centre of attention. One practical insight of the research on procedural justice is that policing can be effective not only by deterrence through tough law and order policing strategies, but by improving the quality of contact between officers and members of the public. This improves legitimacy and public trust in the Police as an institution, which in turn again increases conformity by the Public with the Law. A criticism of the procedural justice approach is that it overemphasis the role police contact has in the formation of public perceptions of the police. Most people have hardly any contact with the police directly and may therefore base their views about the legitimacy of the police more on media, popular culture and tradition. However, in this case there would still be a case for studying procedurally fair practices to improve police legitimacy with those that have interactions with the police – arguably a very relevant group. Also, we will argue that the conception of police encounters only as direct verbal of even physical exchanges is narrow and could be expended to include mutual observation and consequent modification of behaviour (see third paper). With such an extended concept of encounters its relevance for the formation of public conceptions of police legitimacy may also increase.

The UK police are an interesting case in this regard as in comparison with their international counterparts, they are generally trusted and are considered as behaving legitimately (Bradford and Jackson, 2011, Loader and Mulcahy, 2003, Walker et al., 2009). Research in the procedural justice model stream tends to use survey data, and a simple majority criterion of perceived justice to measure public satisfaction, which runs the danger of oversimplifying the workings of the Police and its connection to the Public. Also, this model emphasises the perspective of the Public on the Police. It therefore provides less information about the actual shape of UK police practices on the ground. However, one would expect that this is one of the main drivers, alongside historical developments and media coverage that shape perception of the Police (Hohl, Forthcoming). This is how 'transparency, fair, equitable and respectful treatment, and a feeling of control ... over the processes' are actually transmitted in the activities of officers. Thus, the relevance of the proposed research becomes apparent. Collecting and categorising recordings of police practice allows us to

develop a refined understanding of what practices foster police legitimacy alongside a body of recorded explicit and detailed examples.

The work reviewed in this section points to the fact that street level policing practices are evolving in relation to the policed public. It has also become evident that a defining factor of policing is power. Further, it became apparent that fine-grained research on the micro dynamics of police practice that provide empirical data that can be scrutinised by others is scarce. The above research helps to theorise the social context, but it is silent on the impact of the physical environment on officers' activity. However, the fact that the introduction of new technologies such as BWV can reshape policing practice needs to be considered and, as will be demonstrated in the next section, this is a phenomenon repeatedly observed in the literature.

2.1.2. Policing and Technology Induced Change

Technological changes drive the evolution of policing – time and again devices with new affordances have changed the way officers go about their job. There is a broad literature exploring these dynamics we will here only present a small selection of it to motivate our aim to continue to monitor this evolution also in regards to BWV. Banton conducted fieldwork in Scotland and the USA. His research foresaw that technological changes are likely to change the nature of how policing is practiced. At the time, it was the spreading of the telephone that allowed for the Police to be called when needed (Banton, 1964). Holdaway (1983), himself an urban police officer, prior to his academic career, provides an analysis of low-ranking officers and police culture. He describes how the introduction of radios made patrolling in cars the preferred choice over foot patrols for most officers, an observation shared with Smith (1983). It is argued that this removed officers from direct contact with the community. The introduction of radios, according to Holdaway, also changed the dynamics with the public. While officers needed to be able to 'talk themselves out' of difficult situations they were now more likely to immediately call for support². Also

 $^{^2}$ However, for the UK police this is mitigated somewhat by the fact that they do not carry a gun. In comparison to forces in other countries, UK officers have more of an incentive to solve a situation through communication and not let it escalate. This is arguably because they cannot be as certain that they have the upper hand when a situation turns violent as officers with guns. Also for this reason we may expect to find sophisticated de-escalation practices in the analyses of BWV from UK officers.

Rubinstetin (1980) explores how communication as key element of police work can take different forms because of the ways radio technology is used. Together with the literature on the social context of policing, these authors point to the need to further contextualise policing in relation to its physical environment. Manning (2008) explores The Technology of Policing, particularly crime mapping and comes to the conclusion that despite different rhetoric, it has not transformed strategies of policing altogether. However, in contrast to the other provided examples, Manning's work focuses more on the managerial level of policing than on the practices of frontline officers. BWV is likely to have more of an impact on frontline policing and to study how it materialises is an explicit aim of this research.

Body-Worn Video (BWV) also has the potential to be such a practice-changing technology. When evaluating the device for its potential in this regard, however, it is important to look for both the intended and unintended effects. The introduction of BWV may change policing practices through 'rebound effects' (Joore, 2008) such as the shift of responsibility and privacy concerns. One concern that quickly comes to mind with regards to BWV is that it makes very salient, the presence of the 'generalised other' in any situation it is used. Peter Joore (2008) explored these issues in the example of the introduction of devices that are able to locate their owners continuously and in real time. These devices are designed with the intention of increasing safety and security for guards and Alzheimer patients. However, in addition to these benefits, the author discovered unintended negative effects. One of them is the shifting of responsibility to the caretakers of Alzheimer patients. They were now expected to constantly monitor the location of their charge because now they were able to do so. However, while this may increase the security of the patients, it does so at the expense of the quality of life of the caretakers who are now expected to be constantly monitoring. This notion of using an object in a different way than what it has been originally designed for has been explored in more detail in the French ergonomics literature (Rabardel and Beguin, 2000, Ombredane and Faverge, 1955, Faverge, 1970) and labelled catachresis:

The term catachresis is borrowed from linguistics and rhetoric [and] it means the use of a word beyond its proper sense, or in place of another. By extension, the idea has been implemented in the field of tools to describe using a tool instead of another or the use of tools for use for which they are not designed. The ability to temporarily associate a tool that is not a hammer with the scheme 'hit', which is usually associated with the hammer, is a catachresis. (Rabardel and Beguin, 2000 p. 9 translated with Google translate)

Westrum (1991) makes a similar point by describing a new technical device as a 'solution', but pointing out that there can be more than one problem which it can solve. These potential solutions and the objectives they provide are often referred to as 'affordances' (Gibson, 1967) in the socio-technical literature.

The question arises of whether BWV creates unexpected effects that alter the way policing is conducted. BWV has officially been introduced for the sole purpose of evidence collection, but Lyell (2010) has pointed to a number of other potential uses such as modifying behaviour by members of the public and the officers, protecting against false complaints against officers, the development of training material and so on. The National Policing Improvement Agency (NPIA) is currently drafting guidelines to provide a national framework on the use of BWV (see Appendix II for a discussion of them). Also, police forces in other countries are taking up BWV and need to develop their frameworks. This research is therefore ideally timed to explore the different uses of BWV and their advantages and drawbacks in such a manner, that it informs policy debate and the development of frameworks around the device.

Specialised Literature on BWV and Technology Induced Change

There are a number of policy papers and feasibility studies available that try to explore the potential effect of BWV on policing. A report commissioned by the Home Office (Home-Office, 2007b) is the first work aiming to identify the effects of headcams on policing practice. The report is based on data collected during the pilot introduction of head cameras in Plymouth and aims at 'quantifying any benefit associated with the use of head cameras' (*ibid*, 2007b p. 47). Thus, it is mostly concerned with the statistical analysis of the impact of the camera. Parameters that are of immediate concern to the Police and easily quantifiable, such as crime rates and complaints issued, are reviewed. Only a small section, based on a survey conducted among officers, provides anecdotal descriptions of qualitative changes induced by the camera. The report concludes that the cameras have a predominantly positive effect on figures of concern to the Police such as complains against officers and convictions. It also reports that members of the public behave more orderly when the device is used. There is no mentioning of officers resisting the use of the cameras. The only negative effects mentioned are technical or comfort related. Two cases are cited where the lack of video material led to incidents not being pursued prior to BWV that would have been followed up on the basis of officers' non-visual accounts. A proof of concept study by the Police in Victoria, Canada (Laur et al., 2010) was similar in design but smaller in scale. It replicates most of the results of the Home Office. Another BWV evaluation in Scotland focuses on the potential financial benefits of BWV (ODS-Consulting, 2011), an interest shared with Sillett (2010) from Surrey Police. They examine the potential benefit and cost saving potential of the entire criminal justice sector beyond the immediate police force. The reports also explore potential problems with the implementation of the device and ways of dealing with them. In order to draw conclusions, Sillett relies on a combination of interviews, questionnaires and her experience as a lead officer for BWV in the Surrey Police. Finally, Lyell, an Australian officer wrote a policy paper arguing in favour of the device. He highlights some of the challenges that BWV can help to overcome (Lyell, 2010).

These practice-oriented publications on BWV allow speculation about some of the effects BWV may have on policing. The level of the actual physical affordance devices used by front-line police officers are carefully tested (Home-Office, 2007b, p. 28). This includes testing for interference with radio wave signals and other equipment, the potential to cause harm in accidents (does the head piece increase the risk of injury in case an officer falls or is hit?), the potential of the device to be turned against the officer (with the Metropolitan Police, the cable connecting the pieces of the device needed to be modified to include points where it can easily break in order to avoid it being used to strangulate an officer). Such testing can only reduce the likelihood but not completely preclude the above-mentioned unexpected effects to spring from the physical layout of the camera. In the context of crime prosecution BWV footage, when available, may prove to be an important piece of convincing evidence that can speed up trials. This is also where some of the reports (ODS-Consulting, 2011, Sillett, 2010) see considerable potential for savings to the Police and the wider judicial system. However, these expectations may be founded on an overestimate of the times that officers directly witness crime in progress to create

such evidence. On the other hand, if this were in fact often the case, BWV in the long run may create an expectation for footage to be available to back up any charges the Police make. Thereby undermining the 'classical' witness statement by officers, or even creating a sense of suspicion against the officer when they lack footage (Home-Office, 2007b).

To summarise, there is some literature describing incidents where technology has induced changes in policing practice and there is literature outside criminology that allows us to theorise these processes of practice change. After reviewing both these bodies of literature, we turned to reports and policy papers that specifically aim to identify the effects that BWV has on policing. However, this body of work has not given sufficient consideration to the fact that BWV is not simply any technology but specifically a surveillance technology. Therefore, what follows is a review of the literature that theorises policing and surveillance.

2.1.3. Policing and Surveillance

The fact that BWV is a surveillance technology, allows us to speculate about the certain unintended effects of this technology using the work of Foucault and others. The possibility for coercion by force has already been identified as central to policing (Bittner and Bish, 1975, Bittner, 2005). The work of Foucault (1977) provides a framework for connecting the visibility the camera introduces into police practice and the power that is inherent to policing activity. Foucault developed the concept of disciplinary power to describe a shift from violence (such as the use of a baton by an officer) to a consistent and bureaucratically administered stream of punishments:

By the word punishment, one must understand everything that is capable of making children feel the offence they have committed, everything that is capable of humiliating them, of confusing them: a certain coldness, a certain indifference, a question, a humiliation. (la Salle in Foucault 1977, p. 178)

We may add to this list: being filmed for the collection of evidence, having your anonymity taken away, becoming more visible as you are made aware that the Police has taken notice of you and is watching. Indeed, central to the concept of disciplinary power is a system of surveillance and its internalisation often visualised by Jeremy Bentham's panopticon.

The exercise of discipline presupposes a mechanism that coerces by means of observation, an apparatus in which the techniques that make it possible to see [and] induce the effect of power, and in which, conversely, the means of coercion make those on whom they are applied clearly visible. (Foucault, 1977 p. 171)

The connection with surveillance cameras is easily made (Norris, 2002, Koskela, 2003). Thus, we may speculate that BWV makes civilian-officer interaction more oppressive by amplifying the element of disciplinary power. However, it is argued that whenever there is the exercise of power, there is also the potential for resistance. Therefore, we may refine our speculation and suggest that up to a point people will behave more politely towards officers when aware that they are being recorded by BWV. However, if they choose to be violent they may be even being more forceful and targeted against the camera-equipped officer. The response will depend on the context, but also on the cultural significance of being filmed for those involved. For some individuals, the camera itself may present a form of aggression that they either choose to 'flight' or 'fight' from. In this case, there would be a need to identify and characterise groups that relate and consequently react differently to BWV.

However, the question of who is the observed and who is the observer remains. BWV documents the behaviour of officers as well; even if it is switched on at their discretion, the guidance on the device requires the officer to only turn it off when the incident is completed. Also, officers cannot be entirely certain of who reviews the recordings and for what purpose. Thus, it can be argued that officers themselves can be understood as prisoners of a 'Body-Worn panopticon'. Based on this reasoning we may speculate that officers are likely to also be more courteous and to do things exactly 'by the book' when recording. Over time, if officers feel they do not have enough control over the device and the recordings, they may develop avoidance strategies such as - not taking it out at all, damaging it, turning it off prematurely, and developing ways of recording that systematically keep out what they do not want to be seen. Officers arguably employed many of these strategies when radios were rolled out in policing. However, a completely opposing scenario is also conceivable; officers may become very comfortable with the device and feel that it helps them 'to cover their ass' against allegations of misconduct. They may then start using it routinely to the point that they are hardly aware of it anymore. Nonetheless, these scenarios still do not capture all that is going on. It has already been stressed that BWV needs to be

understood as part of a larger phenomenon with cameras introduced by both sides; the Police and the Public. In fact, some officers argue that BWV is in part, a response to the Police being filmed more and more often with mobile phones. They suggest that BWV gives them an opportunity to film back and 'tell their side of the story' (Associated_Press, 2009).

BWV as a surveillance technology, may not only affect the behaviour of the public but also that of the officers', and the concept of *Sousveillance* (Mann, 1998, Mann et al., 2003) provides some theoretical exploration of why and how this may be the case. If surveillance is organisations observing people, then sousveillance is the reverse – the observation of authorities by individuals. Mann understands this as a form of 'reflectionism'; mirroring and confronting bureaucratic organisations in order to question the practice of surveillance and establish more of a balance between the individual and the organisation. Mann in this regard also makes the connection to cyborgs³ when he explores the possibility of individuals to equip themselves with cameras to conduct sousveillance. Interestingly, with the introduction of BWV, such cyborgs are being created for the purpose of sur- rather than sousveillance. However, it is worth noting that the presence of online platforms, such as YouTube, facilitate the amplification of sousveillance, as the misconduct of organisations can be easily recorded and made available to a wide audience, a phenomenon explored by Goldsmith (2010) under the heading New Visibility.

In summary, traditional Foucaultian frameworks used to theorise the effect of surveillance on practice can only partly be applied to BWV. This is because BWV not only increases the visibility of MOP but also that of officers. The work of Mann and Goldsmith expands the traditional frameworks in a manner that is likely to make it more applicable to BWV.

This section and the previous section on technology-induced change discussed aspects of policing particularly relevant to this research that investigates policing practice using BWV, which is precisely a surveillance technology, newly introduced to policing. In contrast, the following section focuses on an aspect of policing that BWV

³ The word cyborg may sound more like fiction, but here only points to the fact that officers with BWV are treated as one unit of analysis rather than two distinct biological and technological systems.

based research is particularly well suited to contribute to. The literature on officers' use of discretion is the most relevant to the investigation of the situated cognitive processes of officers.

2.1.4. Policing and Discretion

That the state allows officer to use discretion is a formal acknowledgment of the concrete and messy that cannot be accounted for a priory in abstract law and regulations. This research is therefore well positioned to contribute to the study of discretion because interviewing officers about BWV recording solicits the thinking processes behind their situated actions. Hence, to focus on the officers' use of discretion is precisely to focus on those elements of policing that are about making sense and acting up on the concrete situation at hand. In other words, police discretion is about officer judgment and how it is enacted. It is therefore not surprising that discretion is a well-studied subject in criminology as the following discussion of the literature will illustrate.

The term discretion highlights the authority to both informally or formally proceed with an incident, within legally and institutionally confined boundaries. While de facto discretion is inevitable for reasons that this research will elaborate on there is no de iure discretion in many jurisdictions. While in the UK discretion is legally acknowledged, full enforcement laws in for example the US do not formally recognise the need for discretion. Goldstein (1960) investigated police discretion and drew wider attention to it. He demonstrated that the police regularly decide not to invoke the law even if they are confronted with clearly illegal activity. LaFave (LaFave and Wayne, 1962) elaborated on these findings to reveal that even if MOP is arrested, this is often done for a variety of reasons other than a strict enforcement of the law. In such a way, stripped of the illusion that what the police do is only clearly defined law enforcement, scholars began to study other determinants of the activity of officers. The literature on police use of discretion does not always refer to discretion as such but to problem solving (Dejong et al., 2001), behaviour (Worden, 1989), decision-making (Coates et al., 2009, Schulenberg, 2010) or even officer's specific decision to (non)arrest (Chappell et al., 2006, Terrill and Paoline Iii, 2007), stop a citizen (Alpert et al., 2005), search, use force (Rydberg and Terrill, 2010) and so on.

However, underlying all this research is an interest in officers' (non-)application of formal powers in concrete street-level situations.

Discretion is an important aspect of police practice that finds its application in day-today policing activities but also has wider implications. Officers often informally problem solve, however, they are only able to do so because they have the discretion to also use formal force (Bittner, 2005, Reiner, 2010, Brodeur, 2010). On a macrolevel, the decisions of whether or not to formally record incidents aggregate into overall statistics on crime which shape political discussions and can construe communities as hotspots of crime (Cicourel, 1964, Boivin and Ouellet, 2011, Varano et al., 2009). Discretion has the greatest bearing on those who are on its receiving end in concrete incidents. For this reason, much research narrows its focus onto either the use of discretion in specific incident categories such as disorderly behaviour (Coates et al., 2009), traffic enforcement (Schafer and Mastrofski, 2005) and 'domestics' (Robinson, 2000, Worden and Pollitz, 1984) or onto policed groups such as youth (Schulenberg, 2010) and ethnic minorities (Alpert et al., 2005).

The more formulaic literature aiming to develop models identifies individual-centred, organisational and circumstantial factors that impact the use of discretion. Individualcentred factors generally refer to officers' characteristics, but may also refer to behaviours of suspects such as disrespectful or hostile demeanour (Worden and Shepard, 1996). Here, explanations for the use of discretion are centred in the individual and may refer to ideals or cognitive schemata that officers have of policing (Mendias and Kehoe, 2006, Robinson, 2000), attitudes (Wortley, 2003) and education levels (Rydberg and Terrill, 2010). This line of study often uses experiments, interviews and surveys to elicit data about officers and their reaction to different scenarios. Organisational factors explain the use of discretion with determinants such as departmental goals (Chappell et al., 2006) or administrative structures and directives (Worden, 1989). Here, surveys and police records are conventionally used sources of data. Finally, circumstantial factors can either be understood to refer to the larger neighbourhood context (Sun et al., 2008, Varano et al., 2009) or immediate situational factors (Carter, 2006, Riksheim and Chermak, 1993, Worden and Pollitz, 1984, Dejong et al., 2001). Observational methods are used to investigate all three factors above as well as in most research conducted on discretion. The preference for

observational research is appropriate for the study of a practice that is equally about what is formally recorded and what is informally solved on the spot. If policing were only about mechanically implementing the law, formal records would tell the entire story of what officers do. However, as this is not the case (Goldstein, 1960, LaFave and Wayne, 1962), we need to observe what they actually do.

It is too simplistic to assume that officers opt for either formal or informal procedures in a single moment. The use of discretion is more likely to be a process of decisionmaking unfolding over time (and space). Officers are confronted with 'messy' social situations and need to determine if a specific formal procedure is the best response. In this process, any concrete situation that affords the use of discretion requires officers to interpret organisational and circumstantial factors during interactions with MOP. Interpretation however, already requires that the situation is first taken in physically by the officer's senses and secondly, that these sensory inputs are actually noted and explored on a mental level (Gibson, 1966, von Uexküll, 1956). Only then can officers interpret a situation and ultimately act on the interpretation they derive by using discretion. However, it is challenging to both, theoretically frame and methodologically implement the exploration of the temporal as well as situate cognitive components of discretion. From a structuralist perspective Skolnick (1966) describes discretion as deriving from meso elements of policing role and context such as authority, danger, pressure to produce, which in turn are structured by macro dimensions of policing such as rule of law or authoritarianism, democratic forms and political economies. Others such as Muir (1977) and Chatterton (1983) also sensitively trace complex unfolding dynamics of discretion over time. However, this body of research stays vague in its explanations of discretion and often only makes general references to 'culture' rather than to provide concrete illustrations of how discretion is constructed. As the later requires the collection of empirical material that captures the police work and allows its analysis and presentation in detail such a research gap is not surprising. This is why exploring BWV material within an appropriate methodological framework enables this research to make a relevant contribution. Video is a real-time sequential medium (Knoblauch et al., 2006) and BWV captures perceptual input from the perspective of the officer. In the Methods and Material chapter, the researcher will illustrate how these features can be exploited to investigate the situated and temporal distributed aspects of police discretion.

2.2. Theoretical and Methodological Framework

To this point, this review has focused on the relevant criminological and other substantive literature to provide the grounding in the body of knowledge to which this research contributes. We now turn to the literature outlining the theoretical and methodological framework used to make this contribution and to inform the second research question: How does the introduction of visibility increasing technology such as BWV impact policing? This research adopts a mixed methods approach with the core being Subjective Evidence-Based Ethnography that is contextualised with ethnography, focus groups and desk research. However, since SEBE is the methodologically innovative element of this research, this section explores its theoretical underpinnings in more detail. To do this, we will bring a body of knowledge to criminology that so far has had little attention in this field. A promising theoretical framework for the study of practices, including policing, has been developed with the *situated program* in social psychology, anthropology and sociology. In the following, we will outline this approach in more detail.

2.2.1. Theoretical Framework: Situated Research

There are a number of loosely connected theories and approaches exploring the genesis of know-how through situated cognition. This is what Greeno (2006) calls the *situative* program. Following the tradition of Lewin (1935), Mead (1934) and Vygotsky (Vygotsky, 1978, Wertsch, 1985), theories in this domain focus on entire *activity systems* in their study of cognition: 'complex social organizations containing learners, teachers, curriculum material, software tools, and the physical environment.' (Greeno, 2006 p. 79). By synthesising insights from cognitive science (Newell and Simon, 1972) as well as 'interactional studies' on knowledge such as Latour's (1986), this stream of research is developing as one of the most promising for the study of know-how.

The situated program is not a distinct theory but a collection of theoretical approaches. They all have in common the study cognitive and interactional aspects of knowledge. They investigate knowledge in its natural context. Therefore, they include

the physical as well as the social environment in the study of knowledge as it is contained in an individual's practice. What here is subsumed under the term 'situated' comes with varied labels and has found diverse fields of application. Lave (1988) uses the term 'situated cognition' and as well as Scribner (1984) focuses on reasoning and problem solving in an every-day context. Lave argues that breakthroughs of the mind are 'constructed in dialectical relations between the experienced lived-in world and its constructive order – in practice' (Lave 1988 p. 1890). Some streams in Social Representation theory (Moscovici, 2008) also explore the social functional aspects of representations and how they link individuals to allow them to act collectively in a shared domain of expertise (Lahlou, 2001).

Actor-Network Theory (ANT) is an established theoretical framework that provides minute descriptions of the agency found in the interplay between individuals and their physical and social environment. Actor-network theory provides an elaborate approach to trace the wider effects of technological change. Latour (2005), one of ANT's main proponents, challenges 'classical social explanations' as often being too reductionist when they make reference to 'given' social factors and groups in their explanation of a phenomena. He argues that by taking them as given, one ignores the crucial process of how exactly objects and their users constantly enact and create, which after careful exploration may be called 'the social'. Therefore, Latour calls for minute descriptions of 'acting networks' in order to render visible how a specific coupling of acting individuals *and* objects bring about specific meaning and behaviour. For this aim he invites the researcher:

'to follow the actors themselves', that is try to catch up with their often wild innovations in order to learn from them what the collective existence has become in their hands, which methods they have elaborated to make it fit together, which accounts could best define the new associations that they have been forced to establish... to collect anew the participants in what is not – not yet – a sort of social realm. (Latour, 2005 p.12)

The notion of an acting-network is evoked because Latour insists that

Action is not done under the full control of consciousness; action should rather be felt as a node, a knot, and a conglomerate of many surprising sets of agencies that have to be slowly disentangled. (Latour, 2005 p.44) Finally, Latour points out that one of the best situations to observe such actornetworks is in moments of innovation, accident and breakdown. Considering this summary account of ANT, it becomes apparent that the introduction of BWV into police work provides an ideal situation to apply ANT and should certainly be guided by the insights of this approach.

The communities of practice model (Wenger, 2000, Wenger and Snyder, 2000, Lave and Wenger, 1991, Wenger, 1998, Hibbert and Rich, 2006) is among the most prominent in this field. Even though these research streams do not explicitly refer to each other, key ideas of the communities of practice model resonate with research on criminal justice institutions particularly in the examination of 'Jude Craft' (Galanter et al., 1979, Fielding, 2011). The communities of practice model emphasises the need for practitioners to be socialised by a collective of experts and for these experts to continue to interact in order for knowledge to disseminate and evolve. As opposed to mere teams, communities of practice are characterised by *indigenous enterprise*, *regime of mutual accountability*, and *shared repertoire*. This forms the basis for members to be able to appreciate each other's contribution and participation in the reification of meaning. Wenger suggests that communities of practice provide a forum that allows for the cultivation of know-how because of a mutual appreciation of its tacit dimension by its members:

Becoming good at something involves developing specialized sensitivities, an aesthetic sense, and refined perception that are brought to bear on making judgement about the qualities of a product or action. That these become shared in a community of practice is what allows the participants to negotiate the appropriateness of what they do. (Wenger, 1998 p. 81-82)

Hutchins (Hutchins, 1995a, Hutchins, 1995b), coined the term *distributed cognition*. In his minute descriptions of mentally challenging acts – cognitive ethnographies – such as landing an airplane or navigating, he demonstrates that cognition is distributed between the individual and his workplace e.g. the pilot and the cockpit. For Hutchins (1995a), during a moment of human practice, the development of the practice itself, the development of the practitioners and the conduct of the activity come together. What is important is that they come together not solely in the individual but in the entire workplace.

The concept of tacit knowledge further explores this implicit dimension of knowledge that is only observable in the physical practice of experts. Polanyi points out that 'we can know more than we can tell' (Polanyi, 1967 p.4); that we can know something without being able to put it into logical terms. He suggests that in such situations, we draw directly on sensory information and images to create a form of 'tacit knowledge'. Nonaka (Nonaka, 1994, Nonaka and Takeuchi, 1995) develops one of the most influential models for knowledge management based on this notion. The SECI (Socialization, Externalization, Combination and Internalization) model conceptualises explicit and tacit knowledge as reciprocal but mutually exclusive. Based on this model, efforts in knowledge management should focus on making tacit knowledge explicit. Nonaka's work has many supporters (von Krogh, 1998, Davenport and Prusak, 2000, Spender, 1996) and is insightful in that it helps to understand why efforts to store tacit knowledge is not down on paper, but in the minds and practices of experts (Nonaka, 1991).

However, to label tacit knowledge as only implicit knowledge that can be made explicit misses that this type of knowledge is located not on a symbolic but a situative and enacted level. Some theorists that explore the tacit dimension of knowledge criticise the strict separation of tacit and explicit knowledge as a false dichotomy. Tsoukas is a prominent writer in this field. For him, part of the very definition of knowledge and what makes it distinct from mere information is human involvement. He defines knowledge as 'the individual capability to draw distinctions, within a domain of action, based on an appreciation of context or theory, or both' (Tsoukas and Vladimirou, 2001 p. 973). It is further argued that the ability to draw such distinctions is in an expert's practice; it is often implicit in his or her activity. For this reason, a tacit aspect of knowledge itself cannot be isolated and captured; it can only be demonstrated.

The work of Goffman resonates with the notions of the situated program. He demonstrates that an understanding about social phenomena can be gained by mastering the observation of everyday 'mundane' activities on the micro level. Dramaturgical sociology (Goffman, 1958) stresses the importance of time, place and audience for human action, and has been applied to police research by Manning

(1977). Yet beyond that, Goffman's work informs the present research by providing a rationale for paying due attention to everyday police (inter)actions and suggestions of what to look out for when analysing them. As Giddens (1988) points out, what is characteristic about Goffman is that he theorises encounters as opposed to interaction in social groups. As a consequence, the physical co-presence of actors rather than their membership in a social group takes centre stage. In 'Relations in Public: Microstudies of the Public Order' Goffman (1971) describes the use of eye contact, the relevance of the immediate space surrounding an individual and discusses the advantages and drawbacks of also taking clearly connected groups of people such as couples talking as they walk down the street as opposed to only individuals as a unit of analysis for the study of behaviour in public. Thus, Goffman can be very instructive for the study of any public practice including policing. However, it is important to do observations more systematically than Goffman:

Goffman creates vivid, "like-you-were-there" depictions of daily life consisting of carefully crafted explicit and subtle prose rather than recorded or detailed behavioural reports of locally situated social interaction. The convincing conceptual frames and abstract substantive examples he creates, however are not amenable to designing research that would produce systematic observations of actual settings over periods of hours, weeks and months. While always imaginative, his analytic prose did not readily facilitate the analysis of audio and/or video recordings of socially organized institutional settings. Goffman did describe aspects of how he did his field research in his dissertation, but did not provide detailed notes from his other field research, nor provide readers with hints about how to capture presentations of self in actual settings (Cicourel, 2011 p. 2).

In other words, Goffman's insights can and should also be applied to the study of public police practice; however, the analysis of BWV can and should be more transparent than Goffman and focus more on social knowledge and its relation to action.

Ethnomethodology (Garfinkel, 1991) forms the root of several approaches to the study of situated human practices. It is one of the first approaches which proposes that the social self is realised in interactions, and that consequently the ways in which this self creates meaning in everyday life should be at the core of social science research.

Conversation Analysis (Schegloff, 1968, Sacks et al., 1974) explores how social organisation is accomplished dynamically during talk. Rather than concentrating on grammatical structure, the focus is on the process that allows individuals to integrate their understating of events with how they interpret other individuals' understanding of these events, thus jointly constructing meaning. Several key concepts have been developed to analyse this process. Conditional relevance (Schegloff, 1968) focuses on the importance of sequencing for the creation of meaning, for example, even not saying something becomes significant if it follows a question or greeting. Conditional relevance brings to bear a number of other concepts such as entry into conversation, repair of talk and turn-taking. These are used to explore how individuals coordinate and maintain the process of sense making during communication. Turn-taking is 'characterized as locally managed, party-administered, interactionally controlled, and sensitive to recipient design' (Sacks et al., 1974 p.696). The focus on conversation and how meaning is created 'here and now' is also reflected by the stance that an analyst 'must demonstrate in the events being examined that the participants themselves are organizing their behaviour in terms of the features being described by the analyst' (Schegloff, 1992 p. 192). Therefore, Conversation Analysis tends to focus on the micro-level and somewhat isolated situations. The intention is to identify the communicative resources individuals invoke in a given situation to create an understanding of that given situation.

Workplace Interaction analysis (Heath et al., 2000) follows the tradition of Conversation Analysis. As the name suggests, it focuses on interaction in workplaces. More precisely, it explores how individuals develop professional expertise during interaction with colleagues that may be mediated by tools. It has been used to study a variety of workplaces from control rooms to construction sites to hospitals (Hindmarsh and Heath, 2000). While using the analytical concepts of Conversation Analysis such as focusing on the sequencing of interactions or turn-taking, work-place analysis applies these concepts to other 'modes of communication' (Bezemer and Jewitt, 2010) as well as talk. What a mode of communication is is not comprehensively defined. Rather than intending to list all possible modes, the argument is made that professional groups tend to develop them as refined means of co-constructing meaning. Consequently, work-place studies may explore the simultaneous use of small body movements, handling of specialised tools, pointing

and gaze direction as different modes. This is motivated by the argument that exploring the interplay of modes of communication during multi-modal analysis yields a much richer understanding of co-constructive sense-making processes. The focus on multi-modality also explains the interest in video-as-data as (Knoblauch et al., 2006) it is inherently multi-modal and affords the focus on the repeated analysis of minute details in the co-construction of sense making in a recorded workplace interaction.

Workplace interaction analysis shares with conversation analysis the focus on the moment-to-moment construction of meaning in interaction that is both context sensitive and context creating. They focus on understanding what individuals do solely based on what they engage in the here and now, putting aside the trajectory that brought them there, the larger institutional context and what motivates them towards the future. Thus, this opens these approaches to the criticism that they adhere excessively to the micro level of analysis. Indeed, much research in the workplace interaction tradition is actually augmented by field observation (Knoblauch and Schnettler, 2012) precisely to provide an understanding of these larger complexities that the moment-to-moment construction of meaning takes place in and adds to. However, these supplementing research techniques are often introduced as if the need for them in order to get the 'bigger picture' is obvious (Hindmarsh and Heath, 2000), and it probably is. However, if we were to follow the main line of argument of these approaches, their meaning should be understood out of the moment, and the need to explore macro-level sense making through field observation is actually not evident in their argument.

Cicourel provides a more convincing justification for the integration of the micro with the macro level of analysis that has an actual theoretical base. While his work has similar roots in Ethnomethodology, he criticises Conversation Analysis for only permitting information that individuals make available during talk in their research (Cicourel, 1992). He argues that deliberately or not, researchers use contextualising information in their interpretation almost by necessity. To not make this explicit is more problematic than an adherence to 'in talk provided information' that will add analytic clarity. In Method & Measurement in Sociology (Cicourel, 1964), he argues that the interpretation at macro and micro level often cannot be separated and therefore suggests an integration of the two. A good illustration of such work is provided in his study on juvenile justice (Cicourel, 1968), where the necessity to understand isolated acts by individuals in an institutional context, is illustrated along with the imperative to interpret aggregated macro level quantitative data based on the micro dynamics that produced them.

The analytical approach chosen in this research, aims to integrate the analytical concepts of the Conversation/Workplace Interaction Analysis tradition with the theoretical elaborations of Cicourel's work. A distinctive addition of the methodological framework of this research (SEBE) is also the inclusion of the subject's motivation and goals, elicited by the means of the debriefing interview, in the analysis of situated activity.

Because of the focus on context, situated approaches often use video recordings of naturally occurring practice for their study of knowledge. Goodwin explores sensory perception (mainly vision) by experts of the domain of their expertise. He argues that (1) coding schemes, (2) highlighting and (3) the production and articulation of material representation are essential practices 'through which the object(s) of knowledge which animate the discourse of a profession are constructed and shaped.' (Goodwin, 1994 p. 606). In other words, he makes the point that these practices are an essential part for the exercise of know-how as well as its acquisition within a profession. With Goodwin and also Hutchins using video recorded practices as data points to the fact that video is a powerful means for researching know-how embodied in practice. When in the next chapter we explore the video based research method SEBE, the in this chapter developed theoretical backdrop of situated cognitive processes will be essential. It sets us up for an analytical perspective that focuses us on concrete empirical incidents and the relationship of participants with their physical, social and institutional environment. In that sense SEBE has many similarities with the here presented work but it will also add to these theories methodological and theoretical insight. In contrast to the presented theories SEBE focuses more explicitly on capturing the participants' subjective perspective and on also including participants in the analysis of video data.

This section introduced the theoretical framework of the research, one that highlights the need to explore practice and the knowledge it embodies in combination with the physical and social environment it is situated in. The work of Goffman was used to illustrate both some of the origins and possible applications of the situated program as well as the need for more methodological rigour. Video based methodologies are a promising route in this endeavour. This research uses SEBE, a specific video methodology, which will be explored in its practicalities in the methods chapter. The SEBE approach builds on the here presented situated framework. As a methodology for empirical research it is designed to obtain data for the investigation of situated cognitive processes in the form of video material. However, essential for SEBE is that the in the research participating practitioners take centre stage in collection and even analysis of such video material.

2.3. Conclusion

This literature review set out to demonstrate that the understanding of the criminological literature on how officers' practice is shaped by situational context and interlinked with cognitive processes is underdeveloped. To address this shortfall the situated program, a theoretical perspective developed outside criminology, was presented. Further, the theoretical bases for SEBE, a concrete video methodology enabling research with a situated perspective, was introduced and discussed. The next chapter describes how the merger of a criminological research interest with a situated research framework and methodology was practically implemented.

3. Methods and Materials

The video based components of the employed methods within this work are a contribution in their own right to the study of police activity. For this reason the methodology section provides a detailed description of the employed mixed method research framework with SEBE as the principal element. For the SEBE component of the research, a sample of 28 incidents recorded with BWV was gathered from across 4 UK police forces. These were used for debriefing interviews with 18 officers conducted in the period from 2009 to 2013. The BWV recorded incidents cover a range of situations with stop and search and domestic incidents prevailing. The interviewed officers are active frontline police officers of the lower ranks (PCSO's, Constables and Sergeants) from both Safer Neighbourhood and Response teams. The methodological focus on SEBE derives from the research aim to explore situational and subjective sense-making processes as drivers of policing practice in concrete situations.

In research on policing, a variety of methods have been used to explore aspects of this research agenda. Experiments, interviews and surveys are a preferred choice for research focusing on determinants (such as mental qualities and behaviours) of policing inherent in individual officers and policed MOP. The analysis of police records and policy directives is often sought when departmental goals or administrative processes are used to explain policing practices. The use of observational methods characterises police research in general, because it enables the researcher to also capture informal aspects of policing. Furthermore, observational methods are particularly prevalent in research focusing on circumstantial drivers of policing practice such as the location of an indent or the number of individuals involved. The researcher readily acknowledges the potential usefulness of all these methods in their respective applications. In fact, the employed mixed method research framework is in part an effort to reap their respective benefits. The SEBE component itself is introduced as a methodological innovation, which is argued to combine several of the advantages of the methods mentioned above (for example, combining the observation of informal practices with formal interviews) but which also provides

distinct new advantages (for example, being in a position to analyse the impact of task sequencing on practice).

While SEBE is the main method used in this research, other approaches were also employed to collect data and contextualise the findings derived from SEBE. The core method (SEBE) produces two forms of audio-visual data where one is nested in the other. The first (the lower order type of data) documents the practices in context. The second (higher order type of data) documents the co-constructive sense-making process of these practices between the participant and the researcher. As Jewitt notes:

An important concern for many social scientists using video data is the limited history or context of video data. This can be dealt with by combining video data collection and analysis with other forms of data such as participant interviews, documentary analysis or by adopting a participatory stance to the production of the video data. (Jewitt, 2011 p. 174)

Following this suggestion beyond the two core video based data formats collected with SEBE, three more forms of data were collected. A different method of collection and analysis was used for each of these three contextualising data formats. These contextualising methods and data are closely intertwined with the core methods and are often a direct result of efforts to collect core data or alternatively fed into the collecting of core data. The first method of contextualising data is the use of an (1) expert focus group. The researcher regularly facilitated a group of diverse BWV experts (academics, practitioners (frontline and management), policy makers and endusers of BWV as evidence (prosecutors)) from different regions. They served as a continuous expert group that the researcher could feed his research to, and get input for my research from - minutes and reports of the meetings serve as data and were channelled back to the group for validation (see Appendix II.). This turned out to be a very informative method. However, setting up the group was not originally intended as a research tool. Rather, during the process of approaching a number of organisations in the criminal justice sector in an effort to gain access to BWV footage, the researcher made contact with many different BWV experts that work with the device professionally. Setting up the group originally was a way for the researcher to keep in contact with them and give them something in return for their help. The author noticed that many of the experts operated independently and struggled with

similar problems. The setting of the group seemed a good way to connect experts and give them a forum to discuss issues and exchange solutions.

The expert group also turned out to be an excellent vehicle to support the second type of contextualising method (2), desk research. This group provided much relevant material such as policy papers, reports and user guidelines addressing BWV. The experts work within the confines of these documents as well as produce them. Therefore they were in an excellent position to give the researcher access to the documents and help the researcher understand the relevance of them for their practice. This allowed the researcher to appreciate the 'political' context that officers use BWV in.

Finally, the researcher also conducted classical ethnographic research and became a Special Constable as a corroborating method. In this role and during the application process he kept a research diary, took ethnographic notes and collected material such as letters, forms and training material to document his initiation, learning process and own practice as a police officer. The ethnographic research supported the elicitation of core SEBE data, namely the debriefing interviews. As was noted before, the more informed the interviewer is, the more the interviewed expert can focus on explaining the subtleties of his practice as both share a similar frame of reference (Goodwin, 1994, Wenger, 2000). Also as Lahou (2011a) notices, the analysis of BWV recordings becomes easier if the researcher has an awareness of the context of the recorded practice.

It is in her own subjective spatial representation that the subject acts, and it is the same for those who watch the film, making it easier for analysts to follow the action when the environment where it happens is familiar to them. Analysis of films in a familiar environment is much less tiring, probably because it requires less effort for sensory interpretation. This calls for the analyst to have been in the field herself, which is a limitation. (Lahlou, 2011a p. 634)

Clearly the ethnographic research did not bring the researcher to pinpoint exactly the recording location of the analysed BWV footage. However, it did help him to appreciate the context that officers operate in more generally. Ultimately, doing ethnographic research included peripheral participation; the researcher did undergo the training process that any other novice officer undergoes. As expressed before one

aim of this research is to develop training material that is relevant to the Police. In this regard, being trained himself allowed the researcher to better understand the challenges and demands that police training presents and how it might be improved.

The research at hand draws on a variety of methods and materials that interrelate in different ways. The aim of this overview was to provide the 'big picture' and overarching rationale for the methods and materials used as a whole. In the following section, each type of data and respective method of elicitation is going to be discussed individually. However, because the two types of data that form part of SEBE are nested within each other they are going to be presented together in large parts. They are also examined first, as they present the core data of this research. For the contextualising types of data, the BWV expert or focus group is going to be presented first. Then the focus is going to be on the analysis of policy papers to finally conclude with a description of the ethnographic work as Special Constable. Jointly for all types of data, there is going to be a discussion of triangulating the methods and materials used. What then follows is an examination of the limitations of this particular combination of methods and data and potential alternatives. The chapter will conclude with a presentation of the ethical consideration relevant to this research.

3.1. Core Methods and Materials

The theoretical underpinning of the methodological framework – namely the 'situated approach' - has already been discussed in the Theory and Literature Review. In the following, we will introduce and critically discuss the concrete methodology applied in this research which is Subjective Evidence-Based Ethnography, a methodology that falls within the situated approach. One characteristic of the situated program is its growing reliance on video based methodologies. SEBE is no exception in this regard. Therefore, after introducing SEBE we will turn our attention to the particular type of video data necessary for this methodology.

3.1.1. Subjective Evidence-Based Ethnography

A structured and comprehensive review that actually amounts to a methodological approach for the study of practice with BWV-like devices is presented in a paper by

Lahlou (2011a). It outlines the bases for Subjective Evidence-Based Ethnography (SEBE). In the following, this approach and the motivation for adopting it will be outlined.

Much about Subjective Evidence Based Ethnography as a methodological approach can be inferred from its name. It stands in the ethnomethodological tradition as it aims to understand how *subjects* derive meaning and project meaning onto their environment as part of their daily practices of acting within it. Like conversation and interaction analysis, SEBE employees use video for data collection to create an *evidence base* (however, as will be shown, the recording process is approached in a different manner). Several of the analytical concepts of these research approaches are also applicable to SEBE. However, its theoretical bases are more in line with Cicourel's work (Cicourel, 1964). Thus, it appreciates the need to base an individual's sense making process of the subject (and the researcher) within a critical appreciation of the larger institutional context. This urge to include such institutional variables in the analysis is the reason for the alignment of SEBE with many ethnographic research principles.

Ethnography, a long-standing research tradition in itself has been essential to criminological research in the UK also. Being most prominent in anthropology, ethnographies aim to capture knowledge and meaning that characterises a community by gaining an emic perspective (Headland et al., 1990) of an actor in that community through participant observation. The use of ethnographic method in sociology has its origins with the Chicago School of the 1920's and 30's. These origins can be liked to pragmatism with the emphasis on having practice informed theory and theory informed practices by exploring physical environments and how the communities that inhabit them relate. Originally, ethnographic fieldwork, mostly in Chicago was conducted to explore such ecological factors that help to understand social behaviour in urban settings (habits and habitats). As a part of this larger research agenda, a number of influential studies with criminological relevance have also emerged such as Sutherland's work about differential association (Sutherland, 1947) and Whyte's Street Corner Society (Whyte, 1993). Up to the present day, ethnography plays an essential role in policing research. Studies where the researcher underwent training to become a police officer or can draw on personal experience of being an officer before

becoming an academic directly is found less often but do exist. These include Holdaway's work on police and ethnic minority relations (Holdaway, 1983) and Van Maanen's writing on officers' socialisation processes (Van Maanen, 1972). Furthermore, much of the qualitative research on policing includes at least a component of field observation. Much of the justification for ethnographic research on policing rests on the observation that what police do cannot be reduced to law enforcement (Goldstein, 1960, LaFave and Wayne, 1962).

Chatterton (Chatterton, 1983, Chatterton and Rogers, 1989) takes up the argument of police practices not following defined laws, in the legal, social or psychological sense, and proposes that police actions are unpredictable because the determinates of police behaviour are in the situation at the time. Therefore, this in turn suggests that only if you have been there can you understand a policed situation, hence giving the ethnographer that witnessed it complete authority over its interpretation. Of course this is not very helpful as the only ways in which to gain a shared understanding of policing would be to unconditionally accept the observers account or to observe the policing yourself. If then the different observed incidents sustain different conclusions about policing practice, little can be done to come to a joint understanding. The use of BWV changes this. BWV provides an unmediated (or at least less mediated) account of the situation that allows for the negotiation of a joint interpretation of events based on the same digitalised aspects of that situation. However, as opposed to the use of video following a workplace analysis approach to the use of video, SEBE captures an emic perspective in two ways. Firstly, by literally capturing the perspective of the observer through point-of-view recording and secondly, by soliciting the actor's account of the recording during the debriefing interview. This second step, the debriefing interview, in which participants are confronted with the recordings of their activity, is of central importance in both data analysis and elicitation. For this reason, the debriefing interview itself is also recorded to document the interaction process the interviewer and interviewee engage on based on the subcam⁴ recordings.

⁴ Subcam and BWV are used interchangeably in this research. The word Subcam has its origins in SEBE methodology that relies on this kind of device, while BWV is used in the UK policing context to refer to such devices. There are a variety of both Subcam and BWV devices that have been developed over time by different developers and new ones are added constantly. Therefore, it is not possible to characterise them once and for all or to point to essential differences between BWV and subcams. However, illustrations can be found in Appendix I.

Some of the theoretical premises, logic and intention of SEBE are captured in this citation that also immediately links SEBE back to the reviewed literature on situated approaches and the importance of the physical environment for understanding action.

human activity is by nature situated, that cognition is distributed, that behaviour is the result of a cultural installation, where the material affordances of the setting play as important a role as the social and psychological aspects. It entails that it is, to put it mildly, optimistic to hope that we can explore human activity in laboratory settings; these are better suited to demonstration than to exploration. This calls for observation in natural settings. The solution is to have the real world as an observation setting; the subcam is a solution for this, regarding the capture of relevant, situated, data. (Lahlou, 2011b p. 64)

The quote reveals that the subcam is a critical tool of SEBE. Subcams and BWV essentially provide the same type of data. This also illustrates that small cameras recording from eye-level have found multiple applications. For example:

to monitor the use of mobile phones at UC Irvine (Christensen, 2001, Mark et al., 2002), France-Telecom R&D (Zouinar et al., 2004), as a contribution to Dominique Boullier's multimedia laboratory LUTIN (LUCSI, 2003); to track activity in round patrols in nuclear power plants at EDF R&D; to analyse decision-making in occupational therapy (Unsworth, 2001), sportsmen or fire-fighters (Omodei and McLenna, 1994, Omodei et al., 2005, Omodei et al., 1997), etc. (Lahlou, 2011b p. 639)

This simultaneous application of point-of-view recording for varied research in some regards is not surprising. The technology is ready, is a feasible method to monitor activity and has some clear advantages over classical observation. To begin with, the material is captured digitally and thus becomes a piece of solid empirical evidence. As opposed to field notes from ethnographic research, this evidence is not mediated through the researcher at this stage. Such video-as-data provides a number of advantages that have already been recognised by workplace interaction analysis. They allow the detailed observation of what an individual actually does. However, during the observation one does not depend only on momentary impressions during the observation that considers micro-level factors such as body language, focus of visual attention, and tone of voice, much easier. Also, researchers can revisit their

interpretation of incidents and allow others to question their findings on the basis of the very same material.

Subcams also circumvent the problem of recording biases that are particular to video research and are aimed to capture how a particular individual orients him or herself in the environment. The subjective perspective shows the researcher what information was available to the subject during an action. This makes it less likely to fall into the pitfall of attributing the researchers own 'bird' or 'tunnel' perspective on an incident to the subject. Brown and colleagues explain that it is 'drawing the audience 'inside' engaging us, as embodied, sensual beings in the living details of the things we seek to understand' (Brown et al., 2008a paragraph 7.4.).

That said it needs to be acknowledged that video itself, no matter from what perspective it was recorded, can only provide a garbled account of what the participant actually saw or indeed subjectively experience. Video provides a twodimensional account and the audio is usually recorded in mono, but we see in threedimensions and hear in stereo. Further, video is displayed on a limited screen while actual experience occurs in complete immersion. Therefore, rather than to suggest that subcams provide a complete unmediated account of subjective experience, the argument is rather that they provide an improved approximation of that experience. To be more precise, in terms of the medium subcams capture as garbled an account of experience as static cameras do, because in both cases they provide video-as-data. Nonetheless, the author suggested that the account is more likely to be about what was actually relevant to the subject, because of the subjective perspective it is recorded from.

The extent to which SEBE and researcher recorded video-as-data approximates the subjective experience that is the object research needs to be examined further. For this purpose, it will be useful to consider different dimensions of the data such as its relevance, richness and respectability.

Relevance speaks to the question if the data actually provides an account of the experience that is the object of research. A more technical term would be to construct validity. However, this research does not attempt to provide any statistical analysis

and only speaks about concrete incidents of activity. Therefore, relevance for the purpose of this research is closely related to time and place. Anything we do only occurs once and we can only be in one place at any one time. Relevant data needs to give an account of the events of the same time and place that the activity of interest occurred. Generally, it will be difficult to say much about a specific experience if we only have information about events in a neighbouring town from the day before. Maybe there are ways to establish relationships between these events, but it would certainly not be the most direct route. It is on this dimension and particularly with regards to space, that subcam recordings are argued to be an improvement over recordings from static cameras. To the level that the acting individual orients his or her head, subcam recordings are focused on the space the activity by capturing it as close as possible to where the sensory inputs are taken in by the acting individual (e.g. visual information close to the eyes and sound close to the ears).

For the second identified dimension - richness - content validity would be the more technical term. Because we are interested in distinct experiences, the modes these are experienced in are crucial on this dimension. Modes are somewhat vague and moving concepts. They refer to the way information, obtained through the senses, is interpreted and how this information is in turn manipulated to communicate interpretations. Therefore, underlying any mood are perceptual inputs. It may for that reason, be more practical to consider the richness of data on the extent to which it captures different sensatory inputs. Of course, here again there is a question of relevance. The importance of different sensatory inputs is likely to vary across experiences; those most relevant to the subject engaged in the researched activity are likely to also be those most important in order to obtain rich data. In this regard, the level to which the recorded sensatory inputs account for the level of immersion during the experience is also crucial. The quality of the capture of sensatory input comes into play here. This point was illustrated before by pointing to the fact that video provides only a two-dimensional reduction of three-dimensional visual inputs. Nonetheless, on this dimension, it may be argued that video is a 'high quality' form of data. While far away from capturing all sensatory input completely, it is still the only form of data that captures two forms of sensatory inputs - visual and sound - with a relatively high level of detail. On these dimensions, subcam recordings cannot be argued to be any superior than recordings from static cameras.

Finally, the data dimension of respectability refers to the uprightness of the data source. This is particularly relevant for mediated forms of data that have gone through some form of manipulation for the purpose of collection and analysis – this therefore speaks to any empirical research that works with data. However, when the research is relayed on secondary data there have even been two levels of mediation by this point. Participant observation is here an interesting case in point as they are unmediated in the sense that the researcher obtains an account of experience mediated only by his perception and interpretation, as any experience is and we usually do not account for this mediation. However, ethnographic accounts that are derived from participant observation are a mediated form of data. That is to say they have been transformed into a written account (based on notes taken during the event – itself a form of data) and the reader of that account has no direct access to that experience. The researchers direct access to the examined experience and there is a heavy reliance on researchers as mediators. They are two sides of the same coin and present at the same time, one of the greatest strengths and weaknesses of participant observation. Much depends on the credibility of the researcher that holds much interpretive authority (as discussed with regards to Chatterton's research above). SEBE is also made so powerful by its use of video because it addresses this dilemma. In principle, any reader of an SEBE account can gain access to the same recordings that the researcher used to develop that account

That said video is of course also a mediated account. Factors such as what it focuses on, when it starts and stops have an immediate impact on the account the recordings provide and are often subtler and less work intensive than the alternative existing possibility to manipulate video through computer animation. Therefore, research using video is well advised to be critically aware about the source of analysed recordings. With regards to the comparison between subcam recordings and recordings from cameras placed by a researcher, the case for respectability of data can be argued for both sides. Proponents of researcher placed cameras may make the case that researchers are less socially vested during recording. It is reasonable to suggest that participants recording with a subcam will aim to present a positive image of themselves and the footage that they present is biased by social desirability. However, researchers may be led by their theoretical preconceptions during their recordings, which in turn could also result in a confirmatory bias. If the subject is aware that they are being filmed they are still likely to act in a socially desirable way. The only way to get around this would be to record covertly which is likely to be difficult to ethically and legally justify. On a more practical level, it is easier for an individual using a subcam to continuously follow and focus on events with the recording. It seems unlikely that as an outsider from a third person perspective, you would be able to react and peruse activity with a recoding to the same level. Ultimately however, what is seen as the more trustworthy recoding perspective is more likely to be determined by the reader's ontological position on research. From a realist's perspective, a striving to identify the underlying causes of behaviour that the subject is not aware about and a recoding perspective determined by the researcher may be more appealing. From a position of interpretivism, that aims to learn about the interpretive acts subjects engage in in order to act up on their environment, a researcher is likely to prefer subcam recordings, as they focus on the information the subject used at the time of activity.

Beyond all these added advantages that make traditional observational research easier and less prone to bias, the use of subcams also enables something more that SEBE particularly draws on and that has the potential to truly change the nature of observational research. Namely, it allows the observed to become their own observer. They can again see what they have done, and this time without the need to act. All their mental capacity is available to reflect on the recorded nuances of their own actions (Lahlou, 2011a).

Self-confrontation, the process where subjects are confronted with the recording of their own activity, is a central element of SEBE. This technique is shared with a number of other methodological approaches. Rather than leaving the analysis of subjective point-of-view videos exclusively to the researcher, confronting the subject with them is a powerful approach and often used more and more often as part of the analysis. The Theory of Goal-Directed Action (Cranach, 1982, Cranach et al., 1985, Cranach and Kalbermatten, 1982) was one of the first to make use of this method. During self-confrontation, practitioners are shown recordings of their own practices

and asked to share their cognitive processes during the recorded actions. This general principal for the collection of verbal accounts of the subject's mental processes underlying activity can be found in several variations. Newell and Simon (1972) use thinking-aloud protocols, Theureau (Theureau, 2003, 1992) self-confrontation, Vermersch (Vermersch, 1994) explication interviewing; Clot (Clot, 1999) developed cross self-confrontation teaching and Omodei (Omodei and McLenna, 1994, Omodei et al., 2005, Omodei et al., 2002) the cued recall debrief. SEBE shares different elements with all of these approaches and can therefore be grouped with them, but also has several distinct features.

The use of self-confrontation is always geared towards eliciting introspective data, an essential but controversial aim in social science. Introspection is 'looking into our own minds and reporting what we there discover' (James, 1890), vol. I: 185). Wundt, the father of experimental psychology (Kim, 2006) made *Selbstbeobachtung* (introspection) right from the beginning, a cornerstone of psychological methodology. Boring pointed out that introspection is an implicit part of all data collections that ask participants to report internal states such as attitudes and emotions (Boring, 1953). However, reporting *consciousness* is not an easy task as it constantly changes in response to stimuli from our environment and runs with the associations it makes. Also, since we are all inherently limited to only ever experience our own consciousness directly, reporting it is a subjective exercise. These difficulties go a long way to explaining the unease that introspection as a method has created in some parts of the psychological research community.

There are two main criticisms of introspection. Both concern the relation of humans to their consciousness. Nisbett and Wilson reviewed a number of studies to conclude that 'there may be little or no direct introspective access to higher order cognitive processes' (Nisbett and Wilson, 1977 p. 231). Consequently, they argue the case for behaviouristic experimentally tested stimuli response models for the explanation of human behaviour. Critical of this position, Howe (1991) counters by arguing that behaviouristic models are given preference over introspection not only because of their explanatory power. Rather, explanations of behaviour in terms of stimuli response models using supposingly objective external categories are preferred because they affirm the scientific self-understanding of psychology. Explanations of

activity using subjective internal categories such as desires and beliefs derived by introspection are for the same reason often rejected as less rigorous. However, even schools that do not insist on the scientific character of psychology may take issue with introspection. Namely, Freudian perspectives are likely to be similarly sceptical about the effects our conscious has on our activity, arguing that instead for the unconscious as being the driver of our actions. Rather than just dismissing these criticisms, to consider them may help to improve the quality of introspective data and create a critical awareness about what it is that introspection can and cannot do. The first criticism of introspection concerns the quality of introspective data, questioning the ability of the subject to access and report higher order cognitive processes. The second criticism highlights the limited usefulness of the conscious cognitive process to explain activity altogether.

Arguably, the experimental method has been developed from the very beginning to address the first problem (Lahlou, 2011a):

The psychological experiment ... creates external conditions that look towards the introduction of a determinate mental process at a given moment. In the second place, it makes the observer so far master of the general situation, that the state of consciousness accompanying this process remains approximately unchanged. The great importance of the experimental method, therefore, lies not simply in the fact that, here as in the physical realm, it enables us arbitrarily to vary the conditions of our observations, <u>but also and</u> <u>essentially in the further fact that it makes observation itself possible</u> <u>for us</u>. (Wundt, 1904 p. 5, underlining added)

The second criticism concerns an old area of research regarding the connections between intentions and attitudes with action (LaPiere, 1934). Much research has been conducted to identify the conditions under which one predicts the other (Pratkanis and Turner, 1994) and different methods such as self-reports, observation and implicit measurements are used to capture behaviours along with attitudes to establish the link (Martin and Bateson, 1986). SEBE is in some ways, simply reorganising prior efforts to address these issues and supports them with the use of technology that has recently become available. The first problem regarding the ability of subjects to provide good quality introspective data is again addressed by creating the right conditions as described by Wundt in the citation above. However, SEBE is thinking a lot bigger.

setting. Rather, it uses BWV-like devices to make the entire real world that the subject is operating in during the activity of interest an observational setting. The argument is that:

after the fact, provided with the relevant cues, the subject can clinically provide a detailed and grounded-in-evidence comment on her mental processes, without disturbing these since the action already has taken place. This is precisely what new recording techniques make possible. (Lahlou, 2011a p. 611)

Later in the paper, Lahlou elaborates more on how subcams enable a detailed memory of internal states:

The subcam provides material that is especially relevant for the reconstruction of the mental activity. Experience shows that subjects are often able, even weeks after the fact, to recall the situation very precisely. ...This recall effect is probably due to the nature of episodic memory (Tulving, 2002). While semantic memory recalls general relations between objects, episodic memory is a multimodal association connected to an actual lived event (time, place, associated emotions, intentions, contextual knowledge and other associations), which come back as a bundle when the subject recalls the event. Viewing his own film, when put back into an exact relationship with the actual lived sequence, the subject is naturally induced to recall this sequence. Getting multimodal cues allows much better recovery of the events experienced. (Lahlou, 2011a p. 624)

Following this argument it is interesting to note that it is precisely the richness with which the observational setting – the real world – is captured that SEBE enables the subject to provide introspective data. Usually in experimental settings, the environment is reduced to a few controllable variables. In other words, during an experiment we simplify the world to make the observation of inner states possible to the subject. With SEBE, we follow the same goal by providing a great amount of detail to the subjects in order to enable them to recall their stream of consciousness at the time of the recording accurately. This difference is also what allows SEBE to explore and discover factors that influence activity in the real world with some level of external validity. In comparison this makes the experimental method seem somewhat 'stuck' with demonstrating or rejecting the influence of a few variables on activity at a time in an artificial environment. However, to do it justice, it needs to be noted that it does so in a more systematic way arguably providing more solid evidence. For this reason, it could prove particularly fruitful to combine SEBE as an exploratory method with experiments as a confirmatory method.

It is worth noting that SEBE works its way back from action to cognition. In other words, with SEBE we are not developing a cognitive model that then is tested on the basis of its predicting power of behaviour. Rather, SEBE aims to capture activity in its natural environment to then explore the cognition that accompanied the activity together with the subject. Based on this observation, it is reasonable to argue that SEBE is a grounded, exploratory and bottom-up approach that works its way from data to theory. For this purpose, data on both activity and cognition is collected and closely linked. In the process of SEBE, two nested forms of data recordings of debriefing interviews (self-reported) and observation of activity (point-of-view recordings of practice) are elicited and triangulated. This allows the addressing of shortcomings that each form of data would have on its own. Self-reported data often struggles with validity and social desirability, while with purely observational data it is difficult to ascribe intention to the subject. When self-confrontational subjects describe their own intention however, in a more valid manner, the description is specific to the situated time span of activity captured on the BWV recording.

With SEBE closely and continuously interlinking the two different forms of data, this also provides the basis on which the second criticism of introspection is addressed. The link between action and cognition is established by the minuteness of observation and description of cognitive processes required by SEBE. Descriptions of cognition and observed behaviour can be interlinked to the level of one 24th of a second if necessary⁵. This is quite different from asking participants what they think about X in general in order to make broad arguments about their general behaviour towards X (that is how surveys work). In short, SEBE addresses the problem of linking cognition to action by constantly shifting between captured accounts of both and ensuring that they match.

Despite the fact that the account of activity and the cognitive processes resulting from SEBE are empirically grounded in BWV recordings, it is important not to fall into the pitfall of suggesting that SEBE provides the one true account of the activity in question. When researcher and subject jointly review a BWV recording, a self, other, object triad is activated (Bauer and Gaskell, 1999); a social setting is thus created and

⁵ Assuming the usual 24 frames per second today's cameras usually record as a minimum.

a sense-making process initiated. 'The subcamer sees his actions in detail but without being caught in the flow of activity and pressure to act. The researcher takes a dive into the world of someone else' (Lahlou, 2011a p. 635). Therefore, we need to be aware that the account SEBE provides is the result of a communicative sense-making process. To illustrate this point, we can start by noting that by capturing somebody's field of vision we do not yet know what that person perceives let alone how s/he interpreted the situation. This is because perception itself is an activity where we use our limited cognitive capacity to further explore some of the sensory inputs our environment provides us with, on the expanse of other inputs that we disregard (Leont'ev, 1977, Gibson, 1966). Perceiving and interpreting a situation are therefore closely interrelated. What is perceived funnels the possible ways we may interpret a situation (von Uexküll, 1956). In other words, being an organism that has an understanding of its environment requires progressive steps. (1) Having the physical ability to sense/take in aspects of the environment, (2) actively perceiving and exploring some of these aspects on a mental level, (3) ultimately derive an interpretation of the situation based on the perceived aspects of the environment and how they relate to past experiences as well as the individual's norms, goals and motivations.

The conceptualisation of what it means to be an aware and interpreting individual is at the core of SEBE and links clearly with the understanding of knowledge developed earlier: the ability to 'draw distinctions, within a domain of action, based on an appreciation of context' (Tsoukas and Vladimirou, 2001 p. 973). Knowing requires being aware of and interpreting context. When using SEBE to explore how officers know, it is necessary therefore to connect the dots starting from a detailed account of sensory inputs during the moment of knowing (BWV recording), this progresses to an understanding of what elements of these sensory inputs are perceived in order to be able to appreciate how they are interpreted and ultimately acted upon in a knowledgeable way. Note that the BWV recording is only the very first step in this progression. Processes of perception and interpretation still need to be made explicit. This is exactly what the self-confrontation interview is intended to do. Perceiving and interpreting are mental processes verbalising in an interview, and therefore requires translation from the subjective to the inter-subjective. The BWV recording only provides the material to start that communicative process. There is the common expression that 'a picture is worth a 1000 words'. What has been elaborated here hints at is that – while that may be true – we usually don't know what these 1,000 words are for different subjects. Spelling them out explicitly requires embarking on the task of developing a common language, perception and choosing the right vocabulary (interpretation). This process produces and shapes the account of activity provided by SEBE.

Evidently language and verbally accounting for actions is an essential element of SEBE, particularly during the self-confrontation debrief. Therefore, it is important to consider the relationship between language, accounts and the SEBE methodology, as it will shape results derived by this methodology. Cicourel (1964) insists that in the Social Sciences, researchers need to be concerned about the meaning structure the observed subject holds when translating between observed acts and theoretical concepts. Only then can they interpret the results of observations appropriately. For this reason, during the self-confrontation interview participants are asked to account for their actions. Lyman and Scott (1989) have pointed out that accounts are the prime socio-linguistic instrument to render behaviour intelligible. However, the same token accounts are 'employed whenever an action is subject to valuative inquiry' (Lyman and Scott, 1989 p. 112). Therefore, in the process of eliciting the meaning that subjects give to their actions, we also ask them to justify their actions. Lyman and Scott go on to argue that accounts presuppose a speaker and an audience. Further to that as social acts, accounts will be tailored to the social group and situation in which they are given. This is in order to address salient local norms by the idiomatic format which makes accounts more likely to be accepted by the audience. Explaining behaviour by referring to the rules of an organisation is an illustration of this process.

The considerations about language and accounts raise questions for SEBE or indeed any method that uses interviews to gain an insight to human activity. Cicourel's points to the importance of getting the subjects interpretation and thereby endorses the SEBE approach. However, Lyman and Scott's observations show that going down this route raises a dilemma as the subjective interpretation will also be an attempt to justify action and thus will be influenced by the normative setting of the interview. Hence, it is important to reflect on this normative setting, its impact and minimise its impact on the interpretive aspects of the accounts it provides. The setting of an SEBE debrief should minimise the participants need to normatively justify their behaviour. This can be fostered by selecting subcam/BWV recordings for debriefs that focus on officers doing something well as opposed to focussing on situations such as potential misconduct. Also, the interview style should be conducted in a non-judgemental format. The researcher may point out the non-threatening nature of the research and the rights of the participants etc. Also, during the debrief itself, prompts to elicit accounts of recorded activity in the form of practical reasoning (how did you do this?) should be used rather than prompts that tend to elicit normative justification (why did you do this?).

In an SEBE debrief, one goal is to stress accounts as a means to render behaviour more inteligible rather than as a justification of behaviour. This may be achieved by being non-judgmental, picking situations that are less likely to elicit justification – best practices not misbehaviour. This allows prompting in a manner that elicits explanations in forms of logical reasoning, rather than moral justification. However, no matter how sensitive the research approaches the issue of the dual nature of account, it will not be able to fully resolve it. Hence, it is important to interpret results in this light, especially in the policing context where officers are constantly reminded to be able to justify their actions. As a public body that holds considerable power, the Police is an organisation that provides a considerable amount of rules and guidelines that policing should follow and be accounted with. Hence, we may expect that elicited accounts will make references to these rules and guidelines repeatedly.

The researcher and officer have to develop a shared understanding of what it is the recording shows – what aspects of it are perceived and how they are or should be interpreted. Depending on the knowledge gap between officer and researcher, this requires more or less effort and leads the focus to be either on the core or the subtleties of expert knowledge. Let us assume that perception and interpretation of the recorded incident are quite similar between interviewer and subject. Then they will be able to focus in on subtleties of the recorded action and explore more of and possibly even extend their knowledge based on what is displayed on the recording (Wenger, 1998). However, this partly occurs at the cost of not explicitly verbalising the underlying perception and interpretation processes that are at the core of the activity. This is due to the fact that in a conversation, we do not verbalise what we take to be

obvious to our conversation partner (Grice, 1979). In other words, a naïve interviewer is more likely to elicit an account that makes explicit what is otherwise only obvious to the expert, while an interviewer that is an expert of the domain him/herself can hope to extract the type of detailed account from the participant that mark him/her as the kind of practitioner who can teach something to fellow practitioners. Therefore, for SEBE, it is important to consider not only the expertise of the interviewed subjects but also the expertise of the interviewer deliberately and match it accordingly with what it is exactly that the research is interested in exploring.

With SEBE much depends on the candour, competency and cooperation of the subject. Beyond cognitive hurdles in the communicative translation process of perception and interpretation activities from the subjective to the inter-subjective, there are also potential emotional barriers. The more the researcher is able (1) to win the subjects trust; (2) make participating in the research a positive experience and (3) has ensured so that the subject also has an interest and therefore motivation to participate in the research, the more likely participants are to actually want the researcher to understand their practice. These steps also help to make participants feel comfortable to share all aspects of their perception and interpretation process. To be non-judgemental is in this context another important means to help mitigate problems with social desirability. In short, trust is an important research tool for SEBE. This may be somewhat mitigated by the fact that it is an evidence based process (accounts are grounded in empirical recordings of activity). However, at the same time, SEBE is more dependent on trust, as it requires such a prolonged engagement with the participant (recording, selection of recordings, debriefings, communicative validation).

Eye tracking (Duchowski, 2007) can provide another measure of what the subject focuses on. This method is arguably more objective and less dependent on the candour of the subject. Techniques are available that would allow to capture the focus of eye movement on both recording stages of SEBE. That is to say in principle, it is possible to establish where officers gazed on the subcam recoding during the time of its original recording and what they focused on during the self-confrontation debrief. The underlying rationale for the use of eye tracking would be that it provides an implicit measurement of something the subject is not aware of or tries to hide.

However, as already explored in what is taken in, something eye tracking can give an indication of, this cannot simply be equated with what is perceived and interpreted, and something that, on an inter-subjective level, can only be elicited by asking the subject to give an account. Hence after having a BWV recoding that already captures head movement, which is an approximation of eye focus, the added value of eye tracking is marginal. However, it may to the contrary impact negatively on the interview setting, as officers may feel awkward and distrusted by having their attention so closely monitored. Therefore, there is a potential trade-off between developing trust between the officers and researcher, which as was just argued, is of essential importance and getting this additional measure of attention focus. Also, as with all forms of implicit measurements, to actually render it useful one needs to develop a sound theoretical basis that allows it to be interpreted it in a meaningful way. Thus, while eye tracking has the potential to be a useful avenue to peruse in future research, it was deemed that for the present research, that already explores much new methodological territory, the additional practical and theoretical issues it would create are at present not justified by its expected benefits.

By now it will have become apparent that SEBE is a sophisticated method that captures and comprehends activity and the process of developing an understanding of it on multiple levels. Because of the richness of the account SEBE provides, it is all the more important to have a way of structuring these accounts in a way that breaks the descriptions of activity down logically and makes them accessible. One way of doing this is to use the purposefulness of the activity to economise its description and breakdown during coding (Lahlou, 2011a). Activity theory (Engeström and Middleton, 1996, Bödker, 1989, Bödker, 1991, Leont'ev, 1974) provides a convenient framework to reach this aim. Lahlou summarizes the way activity is conceptualised by activity theory and neatly relates its terminology (underlined) that SEBE uses to code BWV recordings:

So activity appears as an oriented trajectory from a given state ('conditions given') to a consciously represented expected state ('goal'). Attaining the goal satisfies the motives of the subject. The trajectory of activity is a succession of small problems to be solved ('tasks'), which can each be seen as reaching a local subgoal. The operator solves each task by taking actions (consciously controlled motor or mental moves) and operations (automatic, routinized moves taking place beyond threshold of consciousness). At each moment,

the subject is confronted with the possibility of taking a <u>different</u> <u>local route</u> to reach the final trajectory, and may do so opportunistically in consideration of the <u>local conditions</u> given at this point. (Lahlou, 2011b underlining added)

Also, Activity Theory invites the researcher to inquire about the overarching beliefs and motives in which activities are nested. However, the framework has mostly been applied to examine an individual's use of objects and may be underdeveloped to analyse the interactions that form an essential part of policing. These and other more practical implications of the SEBE method will be explored in the next section.

We set out to explain the steps that lead from the BWV recording to an account of expert knowledge. In doing so, we described perceptive and interpretive processes as a challenge for SEBE. However, we can also turn it around and argue that enabling and making this translation process explicit is one of the great strengths of SEBE. We know of no other method that takes the insight that interviewing itself is an exercise that socially constructs the phenomenon as serious. At the same time, SEBE does not get lost in the philosophical implications of this observation, but rather finds means to empirically ground its efforts and make explicit as well document this co-construction between participant and researcher. This is also one of the reasons why the debriefing interview itself is recorded, documenting the interactions between interviewer, interviewee and BWV recording.

This section started with a review of the substantive criminological literature on policing with a focus on those aspects of policing particularly relevant to this research. This was followed by the introduction of a theoretical framework along with a methodology grounded in this framework that is new to criminological research on policing. However, apart from adding to the methodological repertoire and knowledge of an academic field of research (criminology), video research in the tradition of the situated program can also be of direct practical benefit for officer training. Much of the situated research originates in efforts to improve the training of professional practices and video is increasingly used not only to research practices but to train in them. The focus of the next and final section of this literature review consists of an exploration of the potential for the present research to make such practical contributions to officer training.

3.1.2. SEBE Data

SEBE uses two different forms of video as data. The use of video as data offers unique advantages but can also be thorny. SEBE provides interesting answers to some of the practical problems that derive from using video for social research. In order to properly introduce the rationale for some of the steps in the SEBE data elicitation process of this research, we are first going to discuss some of the problems of video in research more generally. This enables us to then present how this research uses SEBE to address these problems of video research. To approach the topic of video-as-data more broadly at the beginning is also necessary, as it is a less established and defined methodological field that nonetheless has its particular issues which makes at least a minimum of introduction necessary.

Video-as-Data

When it comes to observational research and more specifically to using video-as-data, there is usually a number of concerns raised particularly regarding reactivity, recall and rationalisation but also some other issues. These are not new and have been described in the literature:

Asking officers to describe the cognitive processes that led them to take observed actions is open to at least three criticisms. First is the problem of reactivity; officers' future behavior may be altered by asking them to describe their thoughts and feelings about the incident just observed. Second and third are problems with the reliability and validity of debriefing data. Are officers able and willing to provide accurate accounts of their cognitive processes, or will their inability to recall or their rationalizations prevent obtaining accurate descriptions? (Mastrofski and Parks, 1990 p. 484)

Assessing the influence of video on the data collected is a key issue that raises questions crucial for the quality of the research undertaken. Heath and colleagues (2010)) and others suggest that social researchers 'address this problem empirically' by examining the influence of video recording on their research subjects (e.g. participant orientations to the camera) and analyse it to understand how and when it arises and its impact on the use of parts of the data. Such analysis shows that the extent of the influence of video recording on data varies depending on the use of the camera whether it is fixed or mobile/roaming (Heath et al., 2010), the length of the study with effect lessening over time (Knoblauch et al., 2006, Kress et al., 2005) and the research context (Jewitt, 2008). Heath and colleagues conclude based on extensive use of video in their research that the issue of 'reactivity' is often exaggerated 'Throughout our studies – of a diverse range of settings and activities ... we found that within a short time, the camera is "made at home". It rarely receives notice or attention and there is little empirical evidence that it has transformed the ways in which participants accomplish actions' (Heath et al., 2010, p. 49). (Jewitt, 2011 p. 174)

However, it is also uncontested that video as data has some clear advantages:

First, it is real-time sequential medium that 'preserves the temporal and sequential structure which is so characteristic of interaction' (Knoblauch et al., 2006 p. 19) - a quality essential for studying 'naturally occurring data'. Second, video can provide a fine-grained multimodal record of an event detailing gaze, expression, body posture, gesture and so on, in which talk is kept in context - a record that cannot be made available using any other technology. Third, video recordings are a durable, shareable record that can be repeatedly viewed (in slow motion), enabling an analytical gaze and multiple passes across data to capture detail that may have been missed in fieldwork observation. Fourth ... it is a medium that features in many people's everyday lives and thus offers new potentials for collaborative work between researchers and participants... The sharable character of video recordings can support analysis by enabling a researcher to revisit the data over a period of time as they develop their understanding and to bring new research questions to the data, and opportunities for multiple perspectives on the data via team viewings and participant viewings. Video data recordings also support empirical comparison of strategies, style and interaction across a data set, and historical comparison between data sets. (Jewitt, 2011 p. 173)

The observation that video is a real-time sequential medium has not been made explicit before but is worth highlighting. When we discuss the findings of this research, it will become apparent that the ability to dissect the sequencing of tasks performed by officers is a great advantage to the study of policing. Video-as-data needs to meet demanding requirements in order to allow for the study of know-how. As argued before, know-how is at the intersection of explicit and tacit knowledge as well as cognitive and interactional processes. For that reason, data that allows for a comprehensive study of know-how needs to capture all of these aspects. Fortunately, BWV recordings meet this requirement for good data of professional police practice. They provide a detailed visual and audio sensory account of professionals (inter)acting with their environment. As Goodwin states: A tremendous advantage of recorded data is that it permits [a] repeated, detailed examination of actual sequences of talk and embodied work practices in the settings where practitioners actually perform these activities. (1994 p. 607)

Despite its uncontested advantages, it is important not to mistake BWV recordings for complete and objective accounts of practice. From a perspective of human experience they are a reduced account of a situation, as some inputs for human senses are not captured at all (no smell, taste and texture). Other inputs are recorded but only to a limited extent (usually no surround recording of sound and a static view with a limited angle).

Also, human experience is continuous while video is not – despite some notable efforts to change this (Mann et al., 2003). In other words, with any recording of human activity, that activity was on-going before the camera was turned on and will continue after it is turned off. These observations raise questions about what, how and when to record video-as-data (Derry, 2007). BWV provides a unique solution to the problem of what, how and when to record video-as-data by making the participant the 'director' of the recording. The quote below hints at a misbelieve of researchers that record video as data easily hold. Namely, because video cameras allow us to engrave a large quantity of information in a short period of time, it is only natural to be confident that the relevant information for the analysis will necessarily be amongst it:

Video can support an exploratory research design or data-discovery phase, as the data, although shaped by decisions in the field (camera position and use, when and where to record, etc.), can remain relatively open for longer. (Although, if effective data management and sampling frames are not employed, this advantage can quickly become a disadvantage resulting in overwhelming amounts of unfocused data.) Participants can be provided with video cameras to represent aspects of their life worlds or practices, including those the researcher cannot be directly privy to for religious or social reasons. (Jewitt, 2011 p. 173)

The point is as Jewitt points out later more clearly, is that the video is shaped by choices of the researcher (and therefore at best indirectly by deliberately considering the researched practice that is recorded):

'video data will be shaped to different degrees by the researcher's choice of camera lens and microphone, camera position, the decision

of whether to use a fixed or mobile camera, the amount of time allocated to recording an event' (Jewitt, 2011 p. 176).

Heath et al (2010) make the argument that preferences with regards to the camera being fixed or mobile may also indicate theoretical stands towards video as data. One understands video as 'illustrative and reveals observations largely generated through fieldwork' while the other treated video as 'the principal form of data on which insights and findings are based' (Heath et al., 2010 p. 38).

At the base of the problem is the fact that any form of video recording is still a selection process, even if one can 'select' many more social situations to be captured than most other methods allow. To be a clear selection in itself is not the problem. Analysis of recordings is a selection process as well. But it can be done explicitly as there is sufficient time to carefully consider, systematically select and justify the aspects of the records highlighted. However, usually in the recording stage, the person filming focuses the camera on where s/he perceives 'the action' to take place on an ad-hoc basis. This is especially problematic when done by the researcher themselves. In such a situation the researcher is prone to focusing the recording on aspects where preconceived notions of a practice lead him/her to expect action to take place – creating a 'confirmative bias'. These tendencies are explored under the heading of intentional blindness (Mack and Rock, 1998, Simons and Chabris, 1999). Alternatively, the camera is static and cannot follow the practitioner through the environment. As a consequence, recordings may be biased and/or uncompleted to an extent that compromises the validity of findings.

Fortunately, a solution for this problem is surprisingly simple. It has already been established that the expert is characterised by an unrivalled appreciation of the subtleties of his/her practice (Wenger, 1998). It is therefore only consistent that experts themselves are made the 'directors' of recordings of their practice. In doing so, recordings become supporting tools that allow experts to share the subjective experience of their practice rather than a flawed attempt of 'objectively' capturing that practice. This is exactly what is happening when an officer uses BWV. Of course, research still has to be mindful about the effects the recoding activity may have on recorded behaviour. The subject may modify their behaviour during recording or record in a manner that highlights those elements of their practice they like to share

and covers up others. This is one of the concerns most often voiced regarding SEBE research. Fortunately, especially for participants that routinely use BWV, this seems to be less problematic than expected. It is difficult to put on a different persona over an extended period of time. Officers comment that they were worried of BWV the first few times that they used it, but they would quickly get used to it and not pay much attention to it after that. This is in line with the experience of the researcher that has worn subcams several times to be able to empathise with the experience. That said, in the long run BWV may change policing practices when officers develop instruction guidelines that come with the device and develop individual strategies to optimize what they 'get out of' using BWV. What we should note here, however, is that these are behavioural changes that are not consequential to the research but of the introduction of BWV to policing (the research only takes advantage of the BWV material that is created as a consequence of this introduction). Effects of BWV on policing practices is exactly what the research aims to explore; it is therefore at least as much a motivation to conduct this research as it is a methodological challenge.

The design of Subcam like devices such as BWV is carefully considered in order to allow the capturing of the best possible data of human practice. BWV as a subcamlike-device has certain qualities that allow officers to record their practice effectively (Lahlou, 1999, Le Bellu et al., 2010, Lahlou, 2009, Lahlou, 2006). Most importantly, when officers film with BWV, the filming activity does not intrude with what s/he does. BWV devices are light and small and do not occupy the officer's hands when filming. Rather the camera is attached to the officer's body in such a way that it is directed at its carrier's field of vision. BWV follows head movements as it is attached to the head at eye level. The device has a sufficiently high resolution and wide angle to include the field of peripheral view. Finally, BWV devices come with a microphone that records what is said and other sounds the subject can hear. The beauty of this simple design is that officers, without much thinking or any other extra effort, 'direct' the recording of their practice – always focusing it on at what they focus at. Therefore, the device allows the creation of data that capture practice as experienced from the subjective perspective of the officers. However, while the advantages of such data for the study of police practice are evident, accessing it is more difficult.

BWV – Access and Elicitation

After a small initial trial that commenced in 2005, a larger pilot of the Devon and Cornwall Constabulary exercised this technology in October 2006. In July 2007, the Home Office provided £3 million of funds for a national rollout of BWV (Home-Office, 2007a). Most UK police forces applied for funding, however, the BWV programs they implemented varied considerably in size and process. Some police forces bought a small number of cameras that ended up on the shelf and were not used. Other forces spend considerable time and effort convincing officers to use BWV and to provide them with working equipment. These differences across forces can arguably be attributed to the presence (or absence) of individuals on the implementation level that championed BWV. There was little guidance from the national level after the publication of the Home-Office document (Home-Office, 2007b) accompanying the initial round of funding in 2007. Several forces reported that they waited for the definition of minimal standards for BWV by the NPIA before they update BWV equipment; however, these standards have never been officially issued. With the uncertainty surrounding the future of the NPIA and spending cuts in policing as a response to national deficit, BWV lacked both leadership and funding in the UK. However, at the same time there has been increased interest in BWV by police forces around the globe including Australia, Canada, China and the USA (Moskvitch, 2012). Therefore, while BWV was on the back foot in the UK with several forces even closing their programs, BWV technology improved and commercial providers developed new devices, supporting equipment and management software (see Appendix I.). Further, the 'digital first' agenda in the criminal justice sector (Ministry-of-Justice, 2012) also created renewed interest in BWV. Finally, the aims of what police hope to realize with BWV technology is expanding. While initially the aim of BWV was focused on 'archiving best evidence', this has been expanded to include aims such as protecting officers against malicious complaints, positively modify behaviour of MOP, and provide officer accountability and use for training (Lyell, 2010). As a result, some forces are now buying new equipment or are even (re)opening their BWV programs.

Some of the material used in this research is sensitive. Furthermore, the UK police is organised in a decentralised way with 43 independent police services in England

alone. Getting access to the material and people needed was therefore a time consuming process that required strategic interaction with different players.

The researcher first made contact with members of the City of London Police (CLP) in early 2008 and was given restricted access to a selection of recordings under close supervision within a few months. With hindsight this was only possible because the CLP is a small police force and therefore 'ways are short'. With advice from the CLP, other police forces and organisations were contacted. Instrumental in this process was also the National Police Improvement Agency (NPIA) that coordinates BWV in the UK. The Metropolitan Police was a somewhat different case, as a formal application to do research needed to be filed with a central unit in charge of organising research at the Met. City of London Police, Surrey Police and the London Metropolitan Police are the 3 police forces that participated in this research. Other police forces have also been approached in the process and signalled interest to participate in the research; however, no BWV based interviews ultimately materialised out of them.

As mentioned before, SEBE elicits two forms of nested audio-visual/multimodal data. The first one being that the actual BWV footage of policing did not require any involvement of the researcher for its creation. It is the product of BWV being introduced to UK police forces for other purposes than research. The work with this material is therefore a secondary data analysis of material not originally intended for research. For this reason the BVW material is also not gathered in the way that research data is/ should be gathered (considering sampling, documenting the data gathering process etc.) and not publicly available either, as research data should be. With the first form of data the work of the researcher is gaining access, sampling and analysis, which will be discussed in more detail below. However, on the other hand, the second form of audio-visual data namely the recording of debriefing interviews based on BWV footage involving the recording officer and the researcher requires much planning and consideration for its elicitation.

Because SEBE is based on two forms of data, there is an inherent element of triangulation built into the method. As Jewitt notices:

The use of video in social research can be broadly categorised in terms of three perspectives: the first, that video captures events 'as they really are', the second that the effect of video on research data serves to distort an event, or third that video is a reflexive tool that researchers and research participants can employ to understand the perspectives, values, practices and experiences that underpin social interaction. These three perspectives relate to theoretical stances on reality, subjectivity and objectivity, researcher and participant roles, as well as research ethics (Jewitt, 2011 p. 175).

With qualifications, it can be argued that SEBE approaches its first level video data (BWV recordings) from the 'video captures events as they really are' perspective. The qualification being that the 'as they really are' needs to be modified to 'as most of the sensory inputs really are from the perspective of the subject'. At the same time, SEBE understands its second type of data (recordings of debriefings based on BWV) very much in the spirit of the described reflexive tool. Recall Heaths' argument about the choice between mobile and static camera being an indication of a theoretical stands towards the data. It is also worth noting that BWV is a mobile camera while the interviews are recorded with a static camera. This repeated crossing of theoretical stands towards the data and practical elicitation of the data denotes the 'triangulative' nature of SEBE. This is also already reflected in the name of the method, which describes it as 'subjective' but 'evidence based'.

It is worth making explicit that the second order SEBE data is already part of the analysis of the first order SEBE data. Therefore, the format of the debriefing interview will be explored in more detail, later in this chapter. For the time being, the focus here is on the immediate steps leading up to the interview and how they shaped the process. First, the researcher would select a number of BWV recordings from a specific officer that could form the basis of an interview. This footage would then be given to the officer in question, along with a copy of the consent form and some information material outlining the purpose of the research. The officer was also given the instruction to ensure that she/he would be comfortable to speak about any of the recordings. They were notified also that they could reject any of the recordings and they then would not become part of the interview without questions asked. These measures aimed at assuring participants and building trust, which is crucial for the successful implementation of SEBE research (Lahlou, 2011a). However, not a single recording was ever rejected by the participants.

Regularly, for logistical reasons, it was not possible to provide the officer with a copy of the recording beforehand. In these cases, the researcher selected a larger number of potential BWV recordings for the interview and would spend a few minutes at the beginning of the interview to select appropriate recordings together with the officer (see table: 'Field-Work Sampling Determinates' for a more comprehensive description of the selection process). In the information about the research provided to the officers beforehand, it was pointed out that the research focuses on best practices and is interested in their professional knowledge as experts. For this reason, officers were asked to help select recordings that showed handling incidents in a manner that others could learn from. This may include challenging incidents that were well managed, but also situations where officers needed to improvise or react to deteriorating situations. The rationale behind this being that during such moments of breakdown and repair, officers become particularly aware of their practice and do not just follow routines and should for that reason, be able to better reflect and verbalise about their practice. Also, the research was interested in moments of policing where BWV actively influenced officer practices. For this reason, recordings where BWV itself became the object of officer-MOP interaction (e.g. a conversation about the camera) or affordances of the device changed how an incident played out (e.g. mentioning the recorded evidence on the BWV device to induce an MOP to admit an offence or comply with some other request) were also actively sought to be included in the interviews. Finally, when officers were asked to sign the informed consent form, it was pointed out to them that they maintain complete control over the data and that they can withdraw and have the already collected data deleted at any time.

While consent is an ethical requirement, this was also done with the same aim in all the previously mentioned steps. Namely, to create an atmosphere where the officer feels comfortable and in control. That the researcher was in the process of becoming a Special Constable may have also supported these efforts, particularly for some of the final interviews. This strategy is consistent with the overall SEBE perspective. Precisely by not being intrusive and pushy for data and information, officers would often be more forthcoming with providing it. As already mentioned, the debriefing interviews are a co-constructive exercise and it is important that interviewees are actually motivated to engage. The only way to stop officers from 'telling stories' is to give them sufficient assurances and guarantees that there is no need to do so. It is therefore no coincidence that the research is mainly interested in best practices in policing. Such appreciative inquiry (Cooperrider and Srivastva, 1987) aims to frame the interview in a positive and nonthreatening manner.

It has been mentioned several times that second order SEBE data is a co-construction between officers and the researcher and that consequently, the expertise of the researcher will impact the level of detail the interview can explore. Therefore, it is worth describing what the researcher did to prepare for the interviews. Here the other forms of data collection come into play. By closely monitoring the policy surrounding BWV and embarking on the process of becoming a practitioner himself, the researcher also improved his ability to communicate effectively during the interview. These other forms of data collection also enabled him to recognise and focus in on meaningful details of recorded practice.

The sampling strategy employed in this research had to be necessarily informal and opportunistic and consequently less systematic. For a discussion of the determinants of the sampling process see table 3. Rather than the quality of the sample strategy, the achievement is rather to have gained access at all. Access to and combination of different data sources and particularly BWV required substantial effort and time commitment. As a result the research does capture considerable variance in terms of the types of incidents (see table 1) and officers (see table 2). Given the level of detail of information that is gathered for each analysed incident the number of cases is actually considerable. Combined with the researcher's experience of even more incidents as Special Constable this allows to identify invariant elements of police practice and account for their exceptions in a manner that both individual case studies (which have the level of detail but not the comparison) and statistical analysis of aggregated data (which allows comparison but does not have the level of detail) would not allow.

Aside from the fact that SEBE requires two forms of nested data, it also follows that there are two forms of interrelated sampling procedures; one on the level of incidents recorded with BWV and another on the level of officers to interview about recorded incidents. Because we only interviewed officers about their own footage they are of course closely intertwined, however, the sampling on each level will have different consequences and this brings its own constraints. Sampling on the level of incidents will determine what area of policing practice the research focuses on. Sampling BWV recorded incidents is dependent on what and how recordings are stored. There is considerable variance concerning storage methods across UK police forces. Also, different BWV cameras are used that vary somewhat in how they record (See appendix I. for a detailed description of the different cameras used by the participating police forces).

Table 1: Types of Incidents6

	Type of situation/ incident	Date at begin. of rec. DD.MM.YY	Time begin. rec. 24hrs	Length rec. Min:Sec
1	Arrest	22.02.10	08:56	12:58
2	Arrest	03.05.09	03:20	27:30
3	Breach of bail	16.05.09	19:34	09:16
4	Demonstration (G20 Protests)	01.04.09	11:00	6:49
5	Demonstration (Scientology)	10.05.08	9:52	13:32
6	Domestic	20.12.09	0:57	39:59
7	Domestic	14.10.09	01:42	40:38
8	Domestic	07.02.10	23:51	20:07
9	Domestic	03.07.10	01:26	5:42
10	Domestic	14.11.10	17:41	29:01
11	Drunk (vulnerable)	08.08.10	02:51	12:41
12	Drunk (vulnerable)	16.02.10	18:21	09:05
13	Investigation of Credit card fraud	01.02.10	16:28	44:48
14	Public Order offence	13:02:10	21:05	7:07
15	Public Order offence	06.02.10	22:12	5:55
16	Public Order offence (skateboarding)	19.06.09	14:14	34:43
17	Public Order offence (urinating)	20.08.10	23:54	11:02
18	Shoplifting	16.11.09	15:03	6:52
19	Stop and account	26.08.09	12:11	14:15
20	Stop and account	18.06.09	09:30	46:19
21	Stop and Search	28.05.09	19:39	7:13
22	Stop and Search	08.04.10	20:38	13:48
23	Stop and Search	22.08.12	11:51	01:04
24	Stop and Search	14.09.12	01:35	21:24
25	Stop and Search	21.09.12	15:14	4:57
26	Traffic operation/ stopping cars	23.06.09	10:14	48:23
27	Talk to victim of break-in	23.10.10	01:32	5:44
28	Informal ad hoc interview not filmed			

⁶ The categorisation of incidents in this table is somewhat arbitrary. Many of the incidents would fit in several categories. Also, the categories cannot be organised along a single dimension (outcome, responsive/ proactive policing etc.). Rather these labels are chosen to reflect the most salient aspect in the debriefing interview that officers focused on when discussing the recorded incidents.

Nr.	Officer's	Gender	Rank	Type of policing	Police
	Pseudonym				Force
1	Konrad	Male	Sgt	Cycle Squad	CLP
1	Neil	Male	Sgt	Neighbourhood	CLP
3	Martin	Male	PC	Cycle Squad	CLP
4	Patrick	Male	PC	Response	CLP
5	Olivia	Female	Sgt	Neighbourhood	Met
6	Frances	Female	PC	Response	Met
7	Helen	Female	PC	Response	Met
8	Ian	Male	PC	Response	Met
9	Albert	Male	PC	Response	Met
10	Jack	Male	PC	Response	Met
11	Ebert	Male	PC	Response	Met
12	Bobby	Male	PC	Response	Met
13	Gordon	Male	PC	Response	Met
14	Dan	Male	PSCO	Neighbourhood	Met
15	Charlie	Male	PSCO	Neighbourhood	Met
16	Lee	Male	PC	Neighbourhood	Surrey
17	Quinn	Male	PC	Response	TVP
18	Roger	Male	PC	Response	TVP

Table 2: List of Debriefed Officers

BWV presents an intuitive tool for recording and transmitting human experience. Further, the police prefer particularly light sensitive devices in order to allow for officers to also record in low light conditions. Most BWV cameras can record for several hours despite the fact that recordings are usually only a few minutes long. BWV cameras are also clearly marked with a flashing light or sign to indicate when they are recording to those who are close by. BWV devices usually have a second back up camera on the chest, in case the head mounted camera stops recording for some reason. There are local differences varying from one police force to another and even from one officer to another with regards to which of the two cameras are preferably used. However, it should be noted that the Carmacam RS2 model used by Surrey police only records from a camera attached to the chest and recordings therefore are not directed by head movement. However, as only a single interview was conducted with a Surrey officer, this should not be of major concern. The Surrey interview was done on an ad hoc basis so that no deliberate sampling of incidents was possible. 4 interviews were conducted with City of London Police officers on the bases of 6 prior selected BWV recordings. However, as the video storage at CLP is not entirely intuitive, the researcher depended highly on the BWV coordinator of the CLP for the selection of recordings. Also, descriptive statistics regarding the overall number of recorded incidents and officers using BWV at the CLP are either not available or no more than an 'educated guess' by the BWV coordinator. The information that is available about the use of BWV and the CLP indicates that in 2008, 44 VV 3000 cameras were acquired. The VV 3000 has the notable function that when on standby, it constantly films 30-second loops without saving them. Only when the officer decides to record does it also save the previous 30 seconds before the record button was pushed. According to the CLP, most incidents they capture with the VV 3000 concern 'Anti-social behaviour' and 'public order' situations. However, only in between 5 to 10 officers still use the device. Finally Thames Valley Police (TVP) uses a hand full of 40 EVEREC ME1 POL cameras particularly to record stop and search incidents. Two officers from TVP were interviewed based on 3 recordings of such searches.

Fortunately, the documentation of BWV use is better and on a larger scale at the London Metropolitan Police or more precisely, the borough of Bromley, which was the last borough that still used BWV until September 2011⁷. The Borough started to use BWV in September 2008 with approximately 40 EVEREC ME1 POL cameras. Response teams as well as Safer Neighbourhood teams used the cameras and according to the Bromley BWV coordinator, domestic and public order offences are the incidents most often recorded. Recordings are stored on a stand-alone server and CARMA software from Reveal Media is used to store and manage footage.

⁷ Another Met Police borough has reinitiated another BWV program in 2012. This however, did not affect the research sample as the researcher only worked with the borough of Bromley.

with an average length of close to 9 min have been uploaded in Bromley overall. About 240 officers are documented to have provided recordings, of which close to 80 are PCSO officers. So far 11 officers have been interviewed between March and June 2011 about 17 incidents that have been recorded at any point during the 3-year trial period of BWV in Bromley. Consequently, there was in some cases, a considerable time span between the date of recording and the date of debriefing. However, while at the beginning, the officer may have commented that they were not sure that they still remembered the incident, when confronted with the footage their accounts appeared not notably less detailed to the researcher as those accounts provided for incidents with a lesser time span between recoding and debriefing. On-going PhD research by Andrea Gobbo supports this observation. In his work, self-confrontation interviews are conducted with the same participants using the same subcam recordings shortly after the conclusion of the recording and one year later. A comparison of the two has not revealed noteworthy changes in the provided accounts. However, further research that isolates the extent and conditions (such as setting and timing of debriefing and the used probing questions) under which self-confrontation with point-of-view recordings enables participants to remember and share their thinking process during the recorded incidents reliably is needed. The storage software allowed the sorting of recordings according to a variety of criteria including recording officer, date of recording, and key words describing the recorded incidents including 'domestic', 'stop and search' and 'stop and account'.

Across all 4 forces, 18 officers were interviewed about 28 incidents. 3 of the 18 officers were female. In terms of rank, 2 of the interviews were conducted with Police Community Support Officers (PCSO) and the rest with either Police Constables or Police Sergeants (see table 2: List of Debriefed Officers). While Sergeants tend to be more experienced then Constables there is little practical difference in the way they would attend to incidents. PSCOs on the other hand are trained differently, carry other equipment and do not share the same powers of arrest Constables and Sergeants do, as a consequence their policing style may be less 'robust'.

With the facilitation that the BWV coordinators and respective video footage storage software could provide, the researcher would preselect videos with the aim of identifying relevant footage that would speak to the research questions. This was not

an easy task as BWV recordings without the explanations of the recording individuals often induce broad speculation on the part of the viewer about what it is that she/he is seeing. Nonetheless, to the best of his ability, the researcher selected recordings that (1) displayed best practices in policing, (2) situations of breakdown and repair – where a planned a activity could not be executed as anticipated and officers had to resolve to spontaneous problem solving (arguably these moments induce reflection about what it is we are doing and indicate an officer's proficiency), and (3) those incidents where the BWV device itself appeared to shape the recorded activity (either because of the affordances the device provides (we here refer to qualities of BWV that enable a specific activity such as playing footage back to an MOP) or because it became itself the object of interaction recorded). For ethical and practical reasons, a number of incidents would be excluded all together. These included footage that simply recorded physical evidence (e.g. a damaged car) and no interaction and on the other extreme very emotional and therefore sensitive incidents (e.g. interaction with a rape victim shortly after the crime). Also, at a later stage the researcher learned from conversations with members of the 'LSE Working Group on Body-Worn Video' that the police has a particular interest in improving their stop and search procedures. Keeping in mind that part of the aim of the research was to be relevant and to feed results back to the police in the form of training material, some focus was put on selecting recordings of stop and search accounts. Finally, it is worth mentioning that many domestic incidents ultimately ended up in the selection. This had several reasons: (1) officers are advised to record 'domestics' whenever possible (for reasons that are going to be explored later), (2) a high percentage of incidents that officers are called to are domestic, and (3) the recordings displaying domestic incidents often appeared to display a high level of sensitive interaction and careful decision-making on the part of the officers.

On a higher level, the observation about domestic incidents also suggests a larger variable impacting the sampling on the level of incidents. Police forces and even boroughs within police forces have very different populations they serve and very distinct environments they operate in. This clearly impacts what officers do and consequently what they may record. To illustrate, the City of London contains several major tourist sites and a global financial centre. Therefore, there are fewer residents living in the area but it is mainly working professionals and tourists that pass through.

Because the size of the policed territory is relatively small, the police are patrolling more on foot and bike as opposed to by car. BWV footage from the City is therefore a lot more likely to be recorded by foot patrols and to concern the night economy (incidents concerning drunkenness or disorder), and tourism (such as lost or stolen property). Bromley on the other hand is a larger, more rural borough of London with a less affluent population. Response teams in vehicles are consequently more prevalent and domestic situations and incidents concerning youth are more frequent on BWV footage. Participating officers were aware of these differences and would often point to them to contextualise incidents captured on BWV that we analysed.

Sampling on the level of officers will determine what kind of individually developed practices the research captures. However, in the context of this research, the ability to deliberately sample officers was constraint. This is because officers self-select on several prior stages. Some forces have head-cams, others do not. Within the forces that have the device some officers use it, others do not. It is voluntary for officers to take the BWV out. Among officers that make use of the BWV some record certain situations that others would not. Finally, participation in the interview is voluntary (even so none of the approached officers declined being interviewed apart from two that could not make it for logistical reasons). To every extent possible the researcher aimed to get a variety of social strata (male/female, different ranks, neighbourhood/response policing etc. - see Table 2) in the sample of officers with the intention of exploring variety in police practice (Bauer and Aarts, 2000). At the same time, it was important to select officers that had a large amount of BWV footage recorded (a cut-off point of 50+ incidents was chosen) as this enabled some level of deliberate sampling on the level of incidents. To choose officers with a much experience with BWV also made it more likely that officers were less conscientious of the device and would therefore perform their routine practices. Overall, the number of interviews that the Metropolitan police agreed on was relatively small (11 interviews). Therefore, it was also important to select officers that could be interviewed about more than one incident. The diverse factors that influence the use of BWV and the necessary considerations for selecting recordings for analysis illustrate the complex issue sampling represents in this kind of research. However, we are not aware of a study that ever satisfied these issues completely. Therefore, we have discussed these matters here at length not because we think that they discredit the research but because we hope that discussion provides valuable information to contextualise the research.

Analysis of SEBE Data

This section focuses on practical analytical steps undertaken in this research. Because of the nested nature of SEBE data, eliciting the second higher order data (recordings of debriefing interviews) is already an analytical step for the lower order data (BWV recordings of practice). Consequently, some of the tools described as data elicitation tools for the second form of data above could also be described as tools of analysis for the first order data here. To name some of them; trust by the participants and creating a setting that induces them to reflect about the details of their practice. Particularly, inducing officers to share their reflections usually took some encouragement/training from the researcher. In interviews, the researcher would usually go with the officer through a number of preliminary steps (see Appendix III: Topic Guide). This includes getting the officer to verbalise what she/he remembers of the incident without seeing the video and what his/her most important aspect of the incident was including the goals and causes for concerns. In general, the importance of the debriefing interview as an analytical step in this research process can hardly be overstated. As observed before in the more theoretical discussion of SEBE, it is at this stage that the researcher develops an interpretation of the recoded activity by discussing it with the participant sharing the same reference point that is provided by the recoding. Therefore, the BWV recording structures the interview by providing incidents of situated policing that can become the object of discussion. For that reason the topic guide is in large parts abstract and generic, and again, the concrete substance of the debrief is provided by the recoding.

During the actual screening of the BWV footage, it was important that the officer verbalises his/her thoughts and not just watch the footage quietly. For this purpose, the researcher would use a number of prompters when necessary and stop the video whenever it appeared that the subject liked to say something. The types of probes used can be seen in the topic Guide in Appendix III. However, they are generally variations of 'what are you doing on the recording and considering and thinking while you were doing it?'. As such the probes are not particularly specific and could be

asked about any recoding of activity. Nonetheless, they provided the researcher with a tool to obtain more detailed narratives about sections of recoded activity if this was deemed useful for the analysis. While the officers were encouraged to stop the recording whenever they liked to comment on something, they would often hesitate to do so at the beginning of the interview. By stopping the video several times himself, the researcher would also communicate that interrupting the video to comment was an intended aspect of the interview. For the last 10 interviews the researcher obtained a small remote to control the recording. Giving the remote to the officers provided a physical prompt to the participants to take charge of the interview. This in turn helped to actively explore the video in a manner where the officer points the researcher to those aspects of the recording that display activity particularly relevant to the subject. The debriefing interview itself was filmed with a static camera and a small microphone would be pinned to the officers' uniform. This second order SEBE data captures the backs of the officers and researcher as well as the screen with BWV footage that they talk about and point to.

For a long time insights from observational research needed to be 'translated' into written words for publications with at the most some stills to illustrate. The fact that now it is theoretically possible to present some of the observations itself as they are captured in the form of audio-visual recordings to illustrate findings is exciting. However, this is still rarely done (Hindmarsh, 2008) with some positive exceptions (Büscher, 2005, Brown et al., 2008b). Even if we see more of this form of presentation, the 'translation' from the audio-visually recoded observational research provides. Gradually, there is also more and more sophisticated software available that supports coding and commenting on videos and transcripts in such a way that it is at any point possible to trace back from the theoretical concept to the part of the transcript illustrating this concept and the corresponding video that provides a visual illustration.

For the study of second order SEBE data, Transana, (Woods and Dempster, 2011, Afitska, 2009) a special video analysis software was used. A main feature of this software is that it allows the transcription of the recording with several transcripts that are simultaneously synchronised with the video. The software then facilitates a

number of different coding procedures where each coding simultaneously makes reference to all synchronised recordings and transcripts. The function to link several video and transcripts is particularly useful for SEBE as it allows it to connect first and second order SEBE data in the process of the analysis. Transcripts of BWV footage can run in parallel with transcripts of debriefing interviews concerning that BWV footage. However, this transcription and synchronisation process is very labour intensive. The material was therefore transcribed in several steps. In the first runthrough the created 'transcript' would only contain a few descriptors and key ideas mentioned to reflect the flow of what was recorded. Then selected episodes that appeared more important for the progression of the activity that were unusual, and particularly spoke to the research questions or were for other reasons deemed interesting, would be transcribed in more detail. Building in this manner a data corpus where each selected episode is justified vis-à-vis their theoretical relevance and marked according to their temporal trajectory (noting where in the tape the incident was described), facilitates further coding. Each episode can becomes a resource for searching for specific, theoretically relevant empirical material that may emerge in other parts of this case and other cases and thereby provide a means of subsequently going to back to earlier episodes in which similar terms were used and how they were examined.

Some argue that visual data can be interpreted in a theoretically endless number of ways (Birdwhistell, 1970). It would then be difficult to arrive at relevant theoretical and empirical invariance with possible exceptions and include macro and (especially) situated, formal, tacit cultural expectations and constraints. Some middle ground can be found by accepting that the findings of the analysis of visual data will be a function of the biases and theoretical assumptions brought up on that data through the research question and theoretical framework but also that the number of feasible interpretations is constraint by the captured situational factors. From such a perspective it becomes imperative to be explicit about the theoretical framework and biases of the researcher as well as the situated details in the data made salient in the analysis.

The sharable character of video recordings can support analysis by enabling a researcher to revisit the data over a period of time as they develop their understanding and to bring new research questions to the data, and opportunities for multiple perspectives on the data via team viewings and participant viewings (Jewitt, 2011 p. 176). For the development of the coding frame (see Appendix IV.) the researcher made use of the affordances of video as data described by Jewitt in this quote. Items to code for that are more substantive with regards to the matter of policing were developed by going back and forth between the policing literature and the SEBE data. In this manner a large body of studies which have purported to have arrived at a number of theoretical claims and empirical findings were explored to deepen our understanding of policing activities, especially the discretion employed and the constraints inherent in discretion embedded in the analysed video recordings.

The materials were also reviewed with fellow SEBE researchers to theorize and discuss collectively the nature of the recorded activity. This process was not formalised to the point that it would allow to make statements about the inter-coder reliability of the coding. However, it did provide a forum to explore if the interpretations of the researcher resonated with others and gain new insights and different perspectives on the material. Finally, the coding frame also included items that did not aim directly at addressing the research questions but were designed as quality criteria and to introduce reflexively into the research. For this purpose, the material was coded for who stopped the BWV recording during the debriefing (the researcher or officer). The assumption is that when either the researcher or officers stopped the recording particularly often at certain types of situations, this would indicate that these are of particular importance to that individual. Also, the ratio of stopped by researcher/over stopped by officer may give some indication about who dominated the interview and whether the officer was properly enabled to reflect about his/her practices and commented frequently or if instead the researcher dominated the exchange and led the interviewee. Also, the material was coded for incidents where the officer anticipates events shown only later on the BWV recording or makes reference to happenings that are actually outside of what the BWV device captured. The assumption here is that both incidents would provide evidence that subjective perspective video recordings indeed trigger detailed memory (Lahlou, 2011a).

For the lower level nested audio-visual data (subjective recordings of activity), this research relies on pre-existing data from the police that was not originally generated for research purposes. Consequently, the data was not elicited with a particular

research question and followed no clear sampling strategy. As a result, the sample is likely to be biased and we can only speculate in what ways. The fact that carrying the device, turning it on and participating in the research is voluntary gives reason to speculate that the interviewed officers are more in favour and at ease with BWV than we can expect the average officer to be. Also, because officers were given explicit guidance to turn on the device for domestic incidents, we can expect this kind of incident to be in proportionately represented. Reversely, mundane police activities such as showing presence by walking and standing in public places (walking the beat) is unlikely to be deemed relevant for recording by officers and will consequently rarely end up in this sample despite it being something that officers spent a lot of time on (HMIC, 2011). Many more potential biases could be speculated about (see also table 3.) but to cut short, there are no grounds to argue that the sample is representative of either officers or policing activity in the UK. However, here again it is a key advantage of this research that the research does not solely rely on BWV data but also trained as a Special Constable. Such an ethnographic component allowed the researcher to reconstruct and interpret available video recordings, not in isolation but against a larger backdrop of experiences with police activities.

Despite its potential shortcomings in other regards, working with secondary data in visual research is very advantageous. It particularly helps to address the problem about the impact of observation for research purposes on the activity that is the object of research itself. This is a debated issue in video research:

The stance that video captures 'what is really going on' and the perspective that video data are 'adulterated and distorts events beyond usefulness' may seem diametrically opposed. However, it can be argued that both are connected by an underlying focus on reality and objectivity and founded on the need to capture and preserve reality. A view of video as wholly distorting raises questions about the character of research per se, and the difference between doing research with or without a camera. This issue can be addressed, at least to some extent, in the methodological research design – through the use of observation prior to video recording (this is also useful in setting up the video recording effectively (Jewitt, 2011 p. 176).

For the work at hand, it is not the researcher that asked the participant to wear a camera but the Police as an organisation. Therefore, the research does not in the same way need to be concerned about its impact on the object of study and how it affects

the findings. This is because by asking its members to carry cameras, the police made BWV equipped officers itself a social phenomenon worthy of investigation. To directly address the problem described in the citation – filming by officers already is the reality. Yet, rather than becoming worried and self-occupied about this fact, this research can focus on determining potential consequences of this change (second research question).

Data and the sampling of it are fundamentally dependent on the question – what is the unit of analysis? In this research the units are police practices. However, as developed in the previous chapter, the insight that practice is a situated activity that is distributed over the practitioner and his/her context is at the core of SEBE. This therefore also needs to be reflected in the sampling strategy. The above described is consequently also the story of a compromise between sampling on a context level (as captured on BWV recordings) and sampling on a practitioner level (officers interviewed). Getting this balance right is important in order to make the research theoretically consistent and relevant (again see Table 3 for a discussion of sampling determinates for this research). At the same time, it moved the sample even further away from meeting the 'gold standard' of being a random sample. But even prior to the actual practical sampling, the concept of such a random sample seems dubious in connection with this research on theoretical grounds. There is no concept of the 'population of police practices' that would need to be known in order to be able to draw such a sample to begin with. For these reasons, this research will not make any claims with regards to the extent to which findings can be generalised. However, aiming to make inferences about a larger population would also mean measuring this research on the wrong standards. The initial aim is rather to discover variety and patterns in police practice, after which further research can aim to make claims about their frequency and distributions. For the time being, we are more interested in the rationale of police practice than in building statistics

Table 3: Field-Work Sampling Determinates

Factors that determined/impacted research sample	Description of impact
Police forces with active BWV programs	The majority of UK police forces have some form of BWV program, varying greatly in scope and level of activity. This research relied on guidance from the NPIA to identify forces that had active BWV programs. But not even the NPIA has a comprehensive list of police forces that use BWV and the nature of their BWV programs. This recruitment process was necessarily informal and opportunistic because police forces tend to be protective of their data. Consequently to gain access, it is necessary to build trust by being introduced and maintain and build up contact over time. In the process of developing a research preposition that police forces were motivated to engage in a focus on stop and search practices evolved. This policing
Willingness of police forces to participate	procedure is increasingly contested so police forces have an interest in exploring how officers implement it in practice. Also, officers tend to record stops and searches when they have BWV and it is a very interesting police procedure requiring interaction with MOP and knowledge of the law. For these reason there is a relatively large number of stop and search incidents in the sample of BWV recordings.
BWV guidance for officers on recording decisions	BWV devices are provided to 'frontline' police including neighbourhood, response and cycle squad teams. There is also a tendency to equip officers during the policing of demonstrations with BWV. In the participating forces, it is policy to turn BWV on for any domestic incident. Otherwise, it is at the discretion of the officer to turn BWV on. However, once turned on, officers are only allowed to turn the device off when the incident is completed entirely.
Take-up of usage of BWV	In all the participating forces, the use of BWV is voluntary. Officers are divided regarding their position on the device, the majority rejecting it as 'big brotherly' with the minority favouring it on the grounds that it protects them from malicious complaints. Take-up is further enhanced by the individual's willingness to engage with the device, influenced by availability and user-friendliness, with 'tech savvy' officers being more likely to use the device. Another factor impacting on take-up is through word-of-mouth with BWV coordinators often championing the technology to their colleagues.
Individual officer's level of use	The research sampled officers who make intensive use of BWV (defined as having more than 50 recordings stored under their name). This pragmatic sampling decision was made in order to be able to interview one officer about several incidents and have recordings where the use of BWV is less likely to have affected the officer's activity. These officers reported that they tend to record every incident they attend when using a BWV device. Hence it was assumed that as they are more relaxed and confident about the device, they were also more likely to participate in an interview.
Status of footage	National guidance requires that video footage, which is deemed by the recording officer to be non-evidential, be deleted after 31 days. Evidential footage is kept for 7

	years. Hence, this research only used evidential footage.
	A number of practical and theoretical considerations guided the researcher's
	selection of footage: the recordings need to capture actual human interaction (i.e.
	not solely an object that was criminally damaged); ethical considerations excluded
	footage showing, for example, victims of rape or corpses; the researcher actively
	sought footage capturing moments where officers needed to improvise or react
Footage selection	quickly to a deteriorating situation, and incidents that appeared to be challenging
criteria	but particularly well managed; Incidents where the BWV device was used to
	actively shape the interaction or became the object of it; recordings that caught the
	interest of the researcher but required interviewing the recording officer for
	interpretation; length of the recoding (not too long to be covered in an interview but
	long enough to be meaningful).
	The respective BWV coordinator of the force asked the officers if they were
	available for debriefings. Providing them beforehand with a copy of the selected
Willingness to be	
interviewed	recordings and the consent form allowed officers to make an informed decision. All
	the officers approached were willing to give an interview. However, for logistical
	reasons, 2 officers could not be interviewed.
	Usually, not all preselected footage could be covered in the time of the interview.
	Therefore, the researcher outlined the research aims and after ensuring that the
Footage selection	participant was in principle, comfortable to talk about any of the recordings (which
criteria in interview	was always the case), asked the officers to select which of the recordings should be
	explored to accomplish these aims.
	Officers were informed that they could withdraw the data they provided at any point
	of the research process prior to publication. The process for withdrawal was also
Withdrawal of data	explained. However, none of the officers made use of this option.

3.2. Contextualising Methods and Materials

What follows is a short discussion of the 3 types of contextualising data that were collected for this research: BWV Expert Group, Analysis of Policy Papers and ethnography as Special Constable.

3.2.1. BWV expert group

One of the core advantages of having and maintaining continuous contact with a group of BWV practitioners is that as experts, group members can provide access to generate an understanding of the making of BWV data. It has already been pointed out that BWV recordings used in this research have not been created for this research but are the result of police internal processes. In order to be able to evaluate the findings that result from these recordings, it is therefore necessary to gain an

understanding of the internal processes BWV recordings result from. The group explored questions such as: How do different BWV devices work? What guidance are BWV equipped officers given? How are recordings stored? In this manner, the research helped to establish the dependability of the used BWV recordings.

In the process of gaining access to BWV footage, the researcher made contact with several professionals involved with BWV across different areas. This led him to initiate the LSE Working Group on Body-Worn Video. The initial rationale behind it was the assertion that the UK criminal justice sector is somewhat fractured and therefore, BWV professionals would particularly benefit from having a forum to meet and exchange their experiences. The group met for the first time in April 2011 and from there onwards every 3 to 4 months. In later sessions, a number of additional experts joined, members of the original group of experts recruited those (see Table 4. for list of participant affiliations). Access to the participants was therefore not too difficult as it merely meant to capitalise on efforts made originally for other purposes. However, this also meant that there was no clear and prior determined sampling strategy. The sample is both a convenience sample of experts and self-recruited. Nonetheless, the group does encompass members from all fields relevant for BWV and does not particularly emphasise one field over another with its composition. Also, prior to being representative, the aim of the sampling was to recruit relevant individuals - meaning real experts dealing with real issues surrounding BWV. As a consequence, the pool of potential participants is inevitably small and from that perspective, the composition of the group is a good reflection of individuals working with BWV.

Table 4: Affiliations of LSE Working Group on BWV Members

- London Metropolitan Police
- National Police Improvement Agency
- City of London Police
- Thames Valley Police
- Hampshire Constabulary
- Surrey Police
- Dartford Council
- Sussex Police
- Norwegian Police University College
- Queensland Police, Australia

The aim of the group was to bring these BWV experts from different geographical areas, functions (frontline BWV use, back-office follow up, management, policy adviser) and perspectives (policing, prosecution and academia) together to discuss issues arising regarding BWV in an open and unconstrained manner. During the efforts to gain access to BWV material, the notion was that many of the individuals professionally dealing with BWV work independently and have little opportunity for professional discussion and exchange. Setting up the group was therefore also a way to give something back to the people that helped with the research – introducing them to each other and providing them with a forum for exchange. Differences in opinion and a variety of viewpoints were encouraged. The assumption is that the diversity among members allows issues surrounding BWV to be considered in a manner where each member shares their individual constrains and needs. Negotiating these perspectives is the best strategy to develop solutions for issues around BWV that are likely to work for the entire criminal justice sector. The data stemming from this method came in the form of presentations and documents provided by the participants. The researcher also took notes during the meeting and drafted short reports afterwards (see Appendix II). These reports were fed back to the participants for their input and to ensure that they accurately described their position. Such commutative validation is also a form of data quality criteria (Bauer and Gaskell, 2000).

For each meeting of the expert group, the researcher would prepare an agenda drawing the attention to a broader topic for discussion. The first meeting was mainly a meet-and-greet session where each expert introduced themselves and what they do with regards to BWV. The second meeting focused on exploring potential applications for BWV beyond evidence collection - mainly training. In the third session, draft guidelines for UK police forces which one of the group members was working on and wanted feedback was discussed. A number of suggestions for improvements were made. By providing information about their work with BWV and discussing it, the group provided guidance and analysis on current and strategic issues surrounding BWV. This allowed the research to stay up-to-date with developments in the BWV field and better steer the research in a manner that it would be relevant to the community of practitioners. By now it will have become apparent that the expert group was not a classic focus group. Rather, it was the 'by-product' of efforts to establish a stakeholder forum that proved to be very informative in unforeseen ways. Also, the researcher had an agenda with the group and was not a neutral convener. Setting the agenda and pushing certain aspects (e.g. the use of BWV for training) made the researcher much more of an active participant. With high insight the group would also have been a good forum to collect information about officer's beliefs about key concepts in policing relevant to this research particularly discretion, however, it was not used for that purpose at the time.

An important advantage of focus groups is that they provide an insight in the dynamic group processes involved in the sense making processes surrounding an object. For the same reason, however, it is very advisable to have more than one focus group as exactly the same processes can lead to extreme and unrepresentative positions (group-think). Nonetheless, all of the participants had a long engagement with BWV prior to joining the group, and some of them were key in the continuous development of BWV and wrote policy papers concerning the device. They are therefore likely to have formed opinions and a position about the device that would not change quickly in a single discussion. Also all participants are part of organisations with specific aims that they continued to uphold. On these grounds it is reasonable to suspect that positions the group formed are more stable and not just the result of momentary interactional dynamics.

3.2.2 Analysis of policy papers

The analysis of policy papers informed the researcher in his interaction with practitioners and allowed the research to be practically relevant. Analysing policy papers and participating in policy debate has allowed this research to appreciate what organisational commitments the police has to BWV. The BWV expert group proved most helpful in these efforts. Members knew best what papers are relevant to their professional dealings with BWV. Further, members of the group provided the researcher with copies of documents that otherwise are difficult to get hold of (not because they are restricted but because they are usually developed with a small audience in mind). Also, rather than sampling the relevant policy papers the aim was still to get a complete overview of all documents relevant to BWV – as this is still a manageable corpus (see Theory and Literature chapter for a review). Members of the group would also help in the analysis of these papers by sharing their interpretation of the document and explaining how they are relevant to their work.

Quality with regards to the work with policy papers is to a large extent about relevance. If because of the study of these documents, this research is able to feed its results back to the police - then the exercise was of merit. It is difficult to establish clear criteria to assess to what extent the research succeeds in this regard. Possible criteria may include the extent to which this research is quoted in future policy papers, whether recommendations made by this research are implemented in practice, if the police start to use BWV for training purposes and further develops this application. The other dimension to judge the study of policy papers on is whether they improved the analysis of BWV recordings. It can do so in two ways. Firstly, during the debriefing interviews, it is easier for officers to communicate what they are doing if the researcher is aware of the guidelines they are operating under. Secondly, the same is also true for the direct study of policing practice as captured on the recordings. Some of the activity filmed will be a function of written guidelines issued to officers about the use of BWV. Following this rationale, the study of written guidelines in combination with the observational part of this research has the potential to be most indicative for the second research question (How does the introduction of visibility increasing technology such as the BWV impact policing?). In other words, the guidelines and policy discussions around BWV are the best source of prescribed

changes in practice. The video-as-data material can then be used to explore if these changes actually materialise.

3.2.3. Special Constable

The last research method used in this research is ethnography. The rationale is that going through the process of becoming a practitioner of policing is a good way for the researcher to learn about the subtitles of this practice. While the study of policy papers allows an understanding of the legal and policy context of policing with BWV, becoming a Special Constable (SC) allows an understanding of the organisational and practical constrains of policing. SC volunteer as fully warranted police officers that have the same powers as regular officers. They wear the same uniform with only a small variation in the epaulettes indicating that they are a SC. As a result, the large majority of lay people will not be able to tell a SC apart from regular officers.

Ethnography is a preferred choice in the study of policing (Holdaway, 1983; Skolnick, 1966) and it is well accepted that ethnography is a good way to capture the vocational aspects of policing in order to get away from the one-dimensional view of policing as strict law enforcement. In other words, ethnography can help to understand the use of discretion and its context on a more cultural level while SEBE focuses on a micro-level of situated practice in context. These two methods therefore complement each other. As data ethnographic studies usually make use of notes by the ethnographer as well as material collected during the participation in the field such as letters forms and documents, the research at hand is no exception in this regard. During large proportions of their training, police trainees were expected to take notes and as a result, the researcher had the opportunity to write his own reflections and observation during the training without it looking out of place.

Several forces recruit their regular officers from the pool of SC. Becoming a SC is therefore the route into policing for many that aspire to this occupation. Hence, even though SC's are volunteers, there are many applicants and there is an extended application process that the researcher had to go through. To apply to become a SC, one must have the permanent right to remain in the UK, and many forces additionally require residency in the UK for at least 3 years. There are also a number of professions such as being a doorman or traffic warden that preclude an application. After an initial paper application that allows a vetting process, a written test and an interview are conducted during a first assessment day. The written test consists of writing a short report about a provided scenario. The interview is a competency-based interview where interviewees need to describe situations that are supposed to illustrate their ability in five areas: Respect for diversity, team-working, personal responsibility, effective communication and community and customer focus. If successful, this is followed by a second assessment day that is comprised of a medical assessment and a fitness test. The application process is designed to take 39 weeks but in the case of the researcher, it took an entire year because the London 2012 Olympic Games interrupted the recruitment process.

After the successful completion of the application process, the researcher had to complete 23 days of training. A successful applicant can choose between different formats to receive the training; as a one-month block course or over 23 weeks with one day of training each weekend or as a hybrid of the two with two weeks blocked training followed by 13 weeks of one day of training each weekend. In order to progress faster with the present study, the researcher opted for the one-month block option and trained every working day in the month of October 2012. This option is also likely to create the greatest level of immersion in the field.

The researcher was the only participant in his class of 12 that had no long-term ambition to become a regular full-time officer. 4 of the researcher's classmates were female which is above the national average of female SC's which was 31% in 2012 (Dhani, 2012). 3 participants had either a non-white or non-UK background which is roughly in line with the Metropolitan police rate of SC's with a minority ethic background of 27.9%, but clearly above the national average of 11.3% (Dhani, 2012). A large proportion of classmates had recently completed school. 4 participants including the researcher were in some form of university education, while 3 had taken up low skilled jobs to bridge the time needed to become full-time officers. The other 5 participants were above 30 years, with several years of work experience and looking for a career change.

The training is an intensive experience. The 23 days can be divided into segments with different foci: A practical teaching of law, Officer Safety Training, First Aid Training, Standards for the completion of paper work, role plays and 'input'. Each of these segments had a different means of assessment. The practical teaching of law mainly focused on breaking down offences that officers often have to deal with such as theft, robbery or public order offences into 'points to prove'. These are acts, characteristics of human relationships and mental states whose presence officers have to ascertain for an incident in order to proceed with the situation as the respective offence. The points to prove for theft for example are: (1) Dishonestly, (2) Appropriates, (3) Property, (4) Belonging to another, (5) With intention to permanently deprive. Each of these points has its own definition and possible exceptions and if they are all present, a specified power of arrest for all these elements were the subject of the law focused segments of the training. The focus was therefore on legal definitions and their illustration with ideal type scenarios that clearly corresponded to these definitions. These scenarios could be clearly categorised with reference to the law. Therefore, students were not provided with complex scenarios and then guided to explore to what extent they may fit under the legal definition of an offence (arguably a closer approximation of what officers do). Therefore, the teaching approach appeared to the researcher somewhat artificial and misleading with regards to how clear-cut cases are likely to be outside the teaching environment. This impression was further cemented by the format used to assess the law component of the training. This was done via several multiple-choice exams. Such exams by nature require, and therefore presuppose, clear right and wrong answers. Furthermore, in order to be difficult enough, these exams often focused on the 'strange' legal exemptions as opposed to the situations officers are most likely to experience. These more common situations certainly have their own challenges that cannot easily be simulated by a law focused multiple-choice test. That said, it is understandable why, in order to make complex law teachable to a diverse group in a short period of time, this subject matter was thought to be 'top down' from the complex but finite law to the empirical situations as opposed to be 'bottom up' from infinite empirical realities to the abstract legal principle. Furthermore, an initial grasping of legal principles may still be a good starting point for new officers that will inevitably be expanded by their empirical experiences on the street.

The first aid and officer safety training had a more practical focus and was continuously assessed through observations by the trainers. The first aid training is largely 'bog-standard' first aid training with a few additions relevant to the police. These include invitations to trainee officers to reflect about how they are going to be perceived in uniform in emergency situations including injured individuals and how to manage these perceptions. Also, trainees were informed about agreements with other emergency services such as the London Ambulance Service about information officers will ascertain and provide if they are the first to attend an injured individual.

The officer safety training was the most physical component of the training and it was repeatedly stressed that it has been designed 'from officers for officers'. It focused on risk awareness, self-defence and restraint techniques as well as the use of the 'personal protection kit' comprised of body armour, handcuffs, baton and CS spray. The joint exercise and training with equipment put OST amongst the most popular and group cohesion creating elements of training. This may put anybody concerned about officers on 'power trips' and covering misconduct at unease. For the researcher, the bureaucratised language used to essentially describe the use of physical force would further aggravate this. The name Officer Safety Training is here already an example of this as it does not acknowledge that it often teaches the means for 'officer safety' that are based on controlling/imposing their will/dominating and hurting others. This becomes even more apparent in the use of the term 'applying compliance' for the idea of momentarily hurting somebody to the level that she/he will do what you say. At the same time, the training was also designed to personally expose future officers to the treatments they may inflict on others in order to allow them to feel the effect of these measures so that they may better judge their impact. As part of these efforts, trainees would be sprayed with CS spray. This was certainly also done to allow them to understand what to expect when they use it out on the street and are exposed to some of the chemical themselves. However, it is also an empathy inducing exercise that should make officers be more considerate in the use of CS spray on others. Also, the training stressed at all times the need for officers to be able to justify any use of force and that they would only be able to do so if it was proportionate, legal and necessary. For the researcher, this training communicated the message protect yourself and others but also protect those that you protect against. This seems to reflect the dilemma that comes with the police's unique position of enacting the

state's monopoly of power in a democratic society with due process against others that are willing to also use force.

The training on completion of paperwork highlighted the need for officers to document what they do. The message to trainees is that to document their actions protects them from allegations and ensures convictions as their action are part of larger processes in the criminal justice sector and will be scrutinised by others. On a practical level, this is reflected in the forms officers fill out and the way they are taught to do so: what to fill out when and what to highlight, the language to use, even the actual manner of handwriting (not leaving space that would allow amending the document, crossing thing out only in a manner that this allow to read what had been written etc.). For this part of the training actual paperwork that was filled out by trainees based on scenarios was then marked by the trainers.

Role-plays and input could both be argued to be evaluations in themselves or not to have been evaluated at all. However, they conveyed to the researcher very different messages about the relevance of their content to the Police as an organisation. Roleplays seemed to be reserved for subject areas that have perceived priority or high practical relevance to the Police such as doing legal stop and searches, conducting witness interviews or doing initial investigations. 'Input' on the other hand seemed to cover material that the Police as an organisation needs to cover in order to protect itself from criticism of even litigation. However, not enough time and effort was spend on these topics to impart a sufficient working knowledge. In parallel to 'input', which was usually a centrally provided PowerPoint presentation trainers presented there are also NCAL packages. These are online learning modules that trainee officers have to complete in their own time. In a time where the Police is closely scrutinised, it appears that with these efforts the Police as an organisation passes some of that pressure on to street-level officers. They train them enough to be able to claim that officers know how to deal with specifying situations correctly but the training is not actually enabling the officer to do a good job. A reverse effect of officer shifting responsibility to the organisation may also be observed with BWV. Some officers are motivated to be quite closely monitored. If everything they do is recorded, then it becomes in theory possible for the organisation to ensure that everything the recoding officer does is done correctly. If the organisation fails to do so despite this possibility, some responsibility for faulty policing by an officer can be shifted to the organisation.

In sum, the month of SC training was an intensive experience that covered a range of subjected areas and communicated a number of messages to the trainees. The researcher was surprised how well he got along with his fellow students. Only 7 of the initial 12 of the group passed the training and would become warranted officers. Therefore for most participants, there was considerable pressure that they may not pass the training; fortunately this resulted in considerable cooperation and mutual support among group members. Before the researcher started the training he had some reservations that it would be overly militaristic and that consequently, he would not fit in with follow trainees that possibly sought a 'power trip'. Certainly, it is a strange and indeed somewhat power inducing feeling when you wear a uniform with all the relevant equipment for the first time, and as was explored, the joint physical exercise during OST has a militaristic element. However, the training heavily stressed the need to justify any actions one does as an officer and document material that supports that justification. This further pointed out the mistakes officers can make and that they will have often-serious consequences. The training left the researcher with a fear to 'messup' than with a sense of power over others. Interestingly that fear of doing the wrong thing equally covers the potential to not follow procedures properly than it does to do wrong to those that you will interact with as an officer.

A key aim of ethnographic research is to understand the system of meaning and the knowledge of the studied community. To be able to establish an officer's perspective in order to understand how she/he interprets the environment, what they are trained to focus on in a situation is important because it is at the core of being able to understand what officers *do*. The link to SEBE should be apparent. The analysis of video that captures an officer's perspective is greatly enhanced by insights from ethnographic research, and can help to contextualise and interpret the material. Of course, the combination of SEBE and ethnography indicates that the research is heavily focused on the police perspective. It can be argued that the combined application of different methods to understand what drives police practice adds to the reliability of the research. At the same time, such 'multiple-immersion' with the officers' perspective may also suggest that the researcher loses critical distance to the object of the study.

Becoming an incorporated part of the studied practices by training as a police officer, the researcher may not be in a position to analyse policing in a neutral manner anymore.

Indeed, the experience of this PhD research has certainly made the researcher more empathetic to the work of officers. Growing empathy is a general phenomenon in police research that Reiss (1968) also observed in the students that did participant observation for his large scale study. Arguably a better understanding of the pressures, positions and challenges that arise from engaging in policing is hardly possible without also creating empathy for this work. Therefore, rather than to focus on one or the other to either praise or criticise ethnographic research, it appears more useful to explore the trade-offs between role familiarisation and incorporation. In this regard, the researcher has the stance that taking on an 'officer's view of the world' is not too problematic as long as that view is not presented in a normative manner, possibly even invoking claims of objectivity. Therefore, rather than to say 'this is how the situation is and ought to be understood', this research means to explain why officers do what they do - 'the officer interprets the situation in the following way and consequently acts up on it in the specific manner s/he does'. This is helped by the fact that descriptions of activity in themselves do not need to carry a normative aspect. To illustrate the importance procedure and paper work has in shaping policing practice is neither very pro nor against police, but something that is key to understand much of what officers do. However, it would probably not have been given the same consideration in this research if it were not for the researchers experience as an officer himself. That said it should be acknowledged that during the PhD research, the researcher's position on police has developed and that this work is more constructive or police friendly (depending on the readers view) than the researcher had originally anticipated.

Being a SC has also facilitated research access. When officers knew the researcher's status they would often be more willing to give an interview and were arguably also more frank as they felt that they are speaking to a fellow insider. This of course raises some ethical concerns, some information possibly was not provided to the researcher in his role as a researcher, but was given to him as a SC and it is open as to whether it should be included in this research. To address this issue, during the SC training the

researcher made no secret of the fact that he was conducting research on policing. He usually explained that he had done research with the police already and that this awakened his interest in policing. That he has an interest in exploring if his research could also be relevant for officer training and that taking part in the training seemed a good way to find out more and would add credibility to any future endeavours to do so – all of which is true. As a matter of fact, the researcher had conversations with fellow students asking them about how they experienced the training and if they felt there was something to improve. Because the group was relatively diverse with different experiences leading participants in wanting to become an SC, at no point did the researcher have the feeling that his motivation was not seen as valid or questioned. It also helped that the researcher could genuinely convene that he was hoping to improve policing and that he wanted to do so in a manner that would engage with the police as an organisation from within.

3.3. Triangulation and Communicative Validation

Throughout the description of methods and materials there was an emphasis on pointing out how they interrelated and cross-fertilised each other. Such an approach is a preferred choice for video research

In the Production of School English Project (Kress et al., 2005), for example, ethnographic field work – classroom observations and teacher interviews, student focus groups and documentary analysis provided contextual information that informed the collection and analysis of the video data. (Jewitt, 2011 p. 174)

The triangulation of methods itself is a useful way to introduce reflexivity into this research (Gaskell and Bauer, 2000). Eliciting different kinds of data on the same phenomena of interest and analysing it with different methods can help to identify consistencies and inconsistencies and invites reflection about them. Such reflexivity is important because this research combines a variety of methods that generally have a focus on subjective experiences (SEBE, ethnography). It is therefore essential to develop and discuss reflexive/inter-subjective criteria to evaluate this research and its findings. This has been done throughout this chapter by identifying quality criteria for each method and material.

Triangulation has originally been proposed in the pursuit of convergent validity, the idea that different measures of the same concept need to reflect their theoretical relation empirically in order to give weight to the theoretical construct and its measurements (Campbell and Fiske, 1959). This line of argument often favours the use of different methods (e.g. quantitative and qualitative) in the hope that they do not share the same biases. However, this also means that the methods used often also do not share the same ontological and epistemological basis. This, however, gave rise to a critic of triangulation in pursuit of convergent validity. It has even been argued that this pursuit 'has no relevance for genuine Interpretivists and ethnomethodologists' (Blaikie, 1991 p. 131) because:

'with an interpretive ontology, with data from different social actors or groups, convergence may mean that consensus exists on how reality is viewed, or that a common social reality is shared, while a lack of convergences may reflect legitimate and different views of reality, or the habitation of different social worlds. Such differences cannot be used to attribute bias to any method' (Blaikie, 1991 p. 123)

However, it is suggested that triangulation within an Interpretivist's framework can be employed to archive a richer account that is marked by 'analytic density'. As an example of such use of triangulation, Cicourel's use of 'indefinite triangulation' is cited (Blaikie, 1991). 'The indefinite triangulation notion attempts to make visible the practicality and inherent reflexivity of everyday accounts' (Cicourel, 1973 p. 124) by producing an at least theoretically, infinite number of accounts of a single original interaction. Blakie also suggests that the sequential use of different methods within a research process where these are supposed to work in an interactive rather than independent manner may be useful but is not triangulation. Blackie's paper is theoretical and therefore does not actually include different types of data and steps to analyse them. This makes it difficult to establish if in practice Blackie's approach overlaps with the strategy outlined for his research. We can only confirm that from a epistemological perspective, the research at hand pursues triangulation with the aim of analytic density rather than convergent validity. This research employs an interpretive approach as it is interested in officers' perception, sense-making process and the practices that are based on them. The chosen methods (SEBE, focus groups, ethnography and desk research) can all be argued to be consistent with the Interpretative approach, which is necessary in order to be able to triangulate them

with the aim of analytic density, as they all allow an understanding of knowledge as relative, subjective and context dependent.

Another overarching quality criterion is the use of communicative validation (Gaskell and Bauer, 2000). The use of the BWV expert group and the self-confrontation interviews to some extent integrate communicative validation mechanisms. However, efforts have also been made for such validation to occur on an explicit and targeted basis. After the analysis of the material the results when possible have been presented back to the participating officers for comments. They were particularly encouraged to comment on the extent to which they feel that the results of the analysis reflect what they refer to on a daily basis and tried to communicate in the debriefings. The BWV expert group was particularly useful in this regard as it provided continuous access to an interested and knowledge audience of practitioners that research findings could be presented to and discussed with. The researcher is aware that such validation can be problematic as the participants cannot always be treated as the ultimate authority in the interpretation of their own action (Nisbett and Wilson, 1977). However, cognitive processes and representations are part of the bases for police practice, which is the focus of this research. There is simply no other way of obtaining them other than asking the subjects.

3.4. Limitations and Criticism

As mentioned already, this research depends heavily on methods that emphasise subjective experiences. That in itself could be a source of criticism or praise depending on the research preferences of the reader. However, the discussion here will stop short of such considerations. Rather, we look into possible criticism from within a research tradition that focuses on subjectivity – namely the fact that the research emphasises one particular perspective and does not consider others. BWV captures what officers see and SEBE aims at uncovering how they interpret what they see. At no point does the research consider how those that are policed see and interpret this practice. The researcher is aware of this limitation and acknowledges it. Not in an attempt to justify but to explain these shortcomings of the research, it is worth remembering that this research is a secondary data analysis when it comes to BWV. No such data is currently available for members of the public. Or to phrase it

more carefully the audio-visual data that is available is very difficult to use for SEBE. On platforms such as YouTube, multiple recordings of police practice filmed by members of the public are freely available. However, they are usually not point-of-view recordings, and there is no way of being systematic in the selection of such recordings and most importantly, it is very difficult to identify the individuals that recorded the footage let alone convince them to participate in research. However, maybe some comfort can be taken from the fact that research that focuses on the members of the public perspective on policing is conducted by others (Sunshine and Tyler, 2003, Wolverhampton-University, 2009, Tyler, 1990, Bradford et al., 2009, Jackson and Sunshine, 2007). Also, in the findings of this research, it will become apparent that officers and the entire police as an organisation are extremely preoccupied with how the public perceives their actions. Therefore, while we do not have direct accounts by members of the public we have indirect accounts of officers modifying their practice because of informed notions about how they are seen by the public.

In addition to researching the perspective of the public on policing, there are a number of other extensions that would form useful additions to this research. We will here only point out two that were considered by the researcher. (1) Adding a cross national comparative dimension to the SEBE component of the research would allow us to give more substance to notions such as 'best-practices' and 'professional knowledge'. Comparing is an elementary research method and a logical pre-requirement in order to be able to talk about something being the 'best' (as opposed to not the best) and 'professional' (as opposed to unprofessional). Of course, there is an implicit comparison in this research between different officers and police forces as well as actual (empirically observed) and prescribed (in legal text, training manuals etc.) practice. However, a cross-national comparison would underline these efforts more clearly. (2) After uncovering and making explicit a variety of police practices it would be a logical next step to investigate the frequency and distribution of these practices. Such additional quantitative research could involve an online survey with embedded BWV recordings clearly exemplifying identified practices. These research avenues have been excluded from the current research for the time being because of the available time and resources. However, the researcher recognises them as potential

improvements of the research at hand and hopes they will be taken up by future research.

3.5. Research Ethics

For this research, ethical considerations are not only a moral obligation but also a practical necessity. This is because trust and participation of the subject is at the core of SEBE. In social psychological research, subjects are often deceived usually with implicit measurements and are used in an attempt to derive data that participants are otherwise unable or unwilling to provide. SEBE takes the opposite approach focusing not on 'tricking' the participants into providing data only to then analyse it without involving participants in any further manner. Rather, the aims of this research are shared with participants; efforts are made to enable subjects to explain their practice throughout the research process and to clarify the research and its benefit. This is because if we are to make explicit best practices of experts, there is no way around asking those that have developed them in their practice. Officers are the judges of what forms good and bad practice from their professional perspective (others can certainly still disagree on normative and procedural basis) and more importantly only they can share their cognitive processes underlying these practices. Therefore, considering and valuing the participants must be an integrated part of this research. Nevertheless, both research with video and police still command a number of ethical considerations. As noted by Jewitt:

Currently there are few guidelines on video-based social research... The durability and ease of sharing video (particularly in a context of access to social networking and YouTube) can raise participant concerns when negotiating research access, particularly in relation to ethics and anonymity (Jewitt, 2011 p. 173/4)

Gibbs and colleagues make a similar point in that 'Retaining rich multimedia data, for instance as examples in research reports, raises forcefully ethical issues like anonymity, ownership and confidentiality' (Gibbs et al., 2002). Features that were earlier heralded as unique advantages of video as data are at the same time, the source of the problem. Digital AV material is durable and rich in context, easily sharable and people develop some apathy to filming because of the sheer mass of cameras in everyday life. While arguably these are all good developments from a pure research perspective they can also cause ethical problems. (1) Videos can quickly be shared

and multiplied endangering the anonymity of those recorded. (2) Video material is rich and multimodal in what it captures. This also means that behavioural aspects that the subject (or for that matter the researcher) is not aware about at the time of the recording that it may become part of the research. This is problematic in that the subject cannot in an informed manner agree that whatever she/he displayed on the video material is part of the research before it is analysed. (3) Particularly, when video is used to record activity in natural (and therefore not necessarily closed) settings, it is possible that individuals are filmed that have not agreed to be part of the research (Heath et al., 2010). (3) Finally, AV material always carries the potential to make somebody lose face or look bad. This can happen deliberately by framing the recording, choosing particular elements and displaying them out of context. However, the same can also happen unintentionally when the researcher is not aware that information that is on the recording is sensitive to the subject. This problem interacts with the concern that digital video can be shared and multiplied quickly. If data that is embarrassing to the subject leaks it can be impossible to rectify - the Internet does not forget.

A particular concern of video as data arises for SEBE because of the use of point-ofview recording and self-confrontation. SEBE maybe forces subject to face up to an aspect of their activity or relationship with their environment they do not want or cannot bear to be confronted with:

The subcam, which does not follow the direction of the eyes but of the face, continues to film the other's face, and thus reveals her mimics when she listens to you, and believes you do not see her face. These facial expressions so often embarrassingly reveal the depth of her thought (boredom, disbelief, stress, etc.). Therefore the researcher must be extremely careful when using the method, and when clipping should mercilessly get rid of any sequences that could prove too embarrassing for the participants. This is especially the case for interpersonal relations within the family or at work... And of course the researcher should avoid at all costs displaying sequences that would cause a social problem for the participants: making them lose face, confirming professional errors, etc. (Lahlou, 2011a p. 644)

The problem of research confirming professional error particularly rings true in the police setting. The Police is a very hierarchical organisation and under constant scrutiny. If it is revealed that an officer does not perform his/her role professionally it can have serious consequences. At the same time especially because officers carry

particular powers, they should be held in check and be accountable. However, officers should not be disciplined as a consequence of research that they entered with the assurance that would not harm them. This research negotiates this dilemma by putting officers in control of the research process. They had the option of declining to talk about parts of their BWV footage selected by the researcher. For that purpose they were when possible, given copies of their videos before the interview for their review. Interestingly, none of the participating officers ever asked for any of the videos not to be used during the interview. Also, officers would routinely point out situations that would not go according to plan in order to explain what best practices in that particular situation would have looked like. By providing officers with the technical means and a non-threatening environment to reflect about their practices, critical selfreflection would also naturally occur. However, research is always responsible for the subjects participating in it. Therefore, there was a push to reveal bad practices in this research and thereby leave participants open to criticism but it provide no means to address these problems as it would not be ethical. That is why this research is explicitly aimed at feeding back its results in an attempt to help improve policing overall. Therefore, rather than targeting specific incidents and associated officers, the research aims to contribute to make unprofessionalism in the police as a whole, less likely by identifying best practices and improved training. The here described steps to ensure ethical research aimed at addressing concrete concern we acknowledge that the described socio-cultural normative and value difficulties cannot be resolve in our or any other study.

Finally, analysing point-of-view recordings in the police context also may cause concern for those that interact with officers. However, members of the public often interact with officers when they are at their most vulnerable such as when they are victims of crimes, arrested, during domestic disputes or when they are intoxicated, all situations that are potentially sensitive. However, to highlight again, the BWV component of this research is a secondary data analysis. Officers have made the BWV recordings following official guidelines designed to safeguard the rights of those recorded. BWV recording is overt with officers displaying clearly marked signs about their recording activity. Often officers also advise verbally that they are filming. Nonetheless, the researcher excluded recordings from the analysis that were deemed

too sensitive such as interactions with victims of rape and interactions with relatives of recently deceased.

In an attempt to more generally address the above outlined ethical problems the research took several measures. The research is coordinated with the research unit of the Metropolitan Police. As part of this process, the researcher has been vetted. All participating officers gave their informed consent (See Appendix V. for informed consent form). Material used for presentation and publication is modified to inhibit the identification of individuals seen on them. Also, the researcher obliged to the rules of appropriate research data handling as outlined by the ESRC:

Data: must be obtained for a specified and lawful purpose; shall not be processed in any manner incompatible with that purpose; shall be adequate, relevant and not excessive for those purposes; shall be kept up to date; shall be kept for no longer than is necessary for that purpose; must be processed in accordance with the data subject's rights; must be kept safe from unauthorised access, accidental loss or destruction; shall not be transferred to a country outside the European Economic Area unless that country has equivalent levels of protection for personal data. (ESRC, 2010 p. 22)

However, 'ticking all these formal boxes' does not automatically make this research ethical. Arguably, it is more important that the researcher is careful, considerate and acts with good intentions:

In work reported elsewhere (Fraser et al., 2006), we do note that one interviewee suggests that 'I am unhappy with a lot of the legalism. I think it's more my own sense of having a responsibility to the [participant]' – a statement which reflects the sentiments of many of our interviewees. (Hindmarsh, 2008 p. 345)

While this is probably true for all research it has particularly been accepted by the video-as-data literature. Arguably, this is because video carries more reputational risk for the subject than most other forms of data. This is why as Lahlou notes, the researcher who is aware about this problem has to sometimes evaluate data on the subject's behalf and potentially reject the use of certain material despite given consent and all the rules being followed:

Getting informed consents signed is not enough; the researcher must evaluate potential loss of face, and not use 'risky' films. Some interesting raw data must often be discarded for this reason. (Lahlou, 2011a p. 644) Fortunately for the research, the researcher has a strategic interest to consider the interest of the subjects as the following quote indicates:

Firstly, approval for access was achieved incrementally, allowing time to develop the involvement and trust of relevant stakeholders. Secondly, access was made easier since the interests of the research team resonated with the more practical concerns of the organisation and staff. (Heath et al., 2010 p. 20)

Such aligning of interest was also sought after in the present research and is, in the author's opinion, the strongest assurance for the research being conducted in an ethically sound manner.

3.6. Conclusion

In this chapter we presented the materials used in this research along with the applied analysis and elicitation methods. There are two core video based forms of data derived from SEBE and three contextualising methods with associated data to support the research. This combination of different methods and materials has certain advantages but also limitations and requires a careful reflection on research ethics.

Forming a PhD in Research Methods, this research aims at methodological innovation. Innovative are the application of SEBE to a new field (policing) and the use of existing *first-person perspective audio-visual recording* (BWV) within a Mixed-Method approach that includes ethnography. It is for this reason that we discussed the methods used at length including their theoretical framework in the last chapter. This discussion has also at least in an abstract manner, responded to the first RQ - What *insight does a fine-grained analysis of first-person perspective audio-visual recording provide about public police practice*? With the following 3 papers the focus will now shift more to the substantive insights that this approach provides when applied to the practical field of policing.

4. First Empirical Paper on Discretion and Sequence

4.1. Introduction

Funding

This work was supported by the Economic and Social Research Council [Postgraduate Funding] and the Hans-Böckler Stiftung [Postgraduate Funding].

Acknowledgements

Professor Saadi Lahlou and Dr Jon Jackson supervised the empirical research on which the paper is based. This paper was written on Professor Cathy Campbell's 'Getting published' workshop at the LSE's Institute for Social Psychology. Thanks to Professor Campbell, Mira Shibaru and Daniel Bear for detailed comments and advice on the manuscript. Further, I am grateful to the Directorate of Strategy Performance and Professionalism of the London Metropolitan Police and members of the LSE Working Group on Body-Worn Video, particularly Anthony Lewis-Webber and Joe Garnett for facilitating research access to BWV data.

Abstract

This paper explores how London police officers translate complex social situations into actionable incidents. The study uses an innovative methodology and social-psychological theory to explore different phases of action during policing. Police discretion – the power to address a situation either formally, evoking legal categories, or informally, using situated problem solving – is conceived as a process of making sense of and constructing a situation. This contrasts with a view of discretion as a single-event decision that is purely a reaction to an objectively recognisable and legally defined situation. Body-Worn Video data from UK police forces is used to interview officers about their cognitive processes at work during street-level policing. Mindset Theory – which breaks activity down into different phases with associated cognitive processes – allows us to theorise how the focus on situational and organisational constraints evolves during an incident. This provides the basis for our argument that discretion is not only about choosing between different legal responses, but also about the process of constructing an incident to be of a formally recognised category of crime that yields specific potential legal responses.

Keywords

Policing, Discretion, Subjective Evidence-Based Ethnography, Situated Cognition, Mindset Theory of Action Phases

4.2. Paper: Situating Police Discretion and Temporal Progression – Using Video-Based Methodology to Understand how Police Officers Translate 'Messy' Social Situations into Actionable Incidents

Discretion is vital in day-to-day policing. Officers often informally solve problems but amongst other factors (Bradford et al., 2009, Jackson et al., 2012) to have the discretion to formally use force enables such problem-solving in the first place. Individual uses of discretion can severely affect the lives of those on the receiving end of it, leading to monetary penalties, criminal records or even loss of freedom, which in turn shapes attitudes towards the police. The basis to legally use discretion in policing derives from the extensiveness and ambiguity of the law, offences are broadly defined, which is then 'mitigated by 'common sense' discretion not to prosecute' (Lustgarten, 1986 p. 15). Therefore, under-enforcement of the law becomes the norm, which provides the flexibility to respond to diverse situations but also opens up the opportunity that certain groups and offences are prosecuted in a lawful but systematically unfair manner (Lustgarten, 1986). This makes it all the more important to carefully explore officers' rationale in their use of discretion. Further, at an aggregate level, individual decisions as to whether or not to formally record incidents of disorder form overall statistics on crime, which then shape political discussions and can result in communities being construed as hotspots of crime (Boivin and Ouellet, 2011, Varano et al., 2009). Lord Scarman, chair of the Brixton riot inquiry described discretion as the 'Art of suiting action to particular circumstances' (Kleinig and Zhang, 1993p. 131).

This research aims to make explicit what constitutes this 'Art' by exploring the question: what processes shape street police officers' use of discretion in responding to incidents of crime? The research tackles this question at three levels. First, it introduces an innovative research *methodology* for exploring the factors that shape police discretion in on-the-spot crime situations. Second, it contributes to *empirical* understandings of police discretion through the mapping out of the temporal nature of officers' cognitive processes. Third, the paper frames the use of discretion theoretically with the Situated Practice approach (Latour, 2005, Hutchins, 1995a, Lave, 1988). This approach positions the decision-maker at the individual-society interface and allows the researcher to explore cognitive processes as not only a

function of the individual officers but distributed between the officer and the environment. Therefore this research contributes to the criminological literature on policing practice by reinvigorating research in this area through the application of new methodologies and theoretical frameworks from psychology.

Existing research has identified individual, situational and organisational factors that impact the use of discretion. Our approach allows the integration of these factors into a more holistic model highlighting the shifting relevance of each of them over time. In exploring the use of discretion in this way we can also challenge a purely linear understanding of it. Discretion is not only about choosing between different legal responses to an incident but also about having the power to construct an incident to be of a formally recognised category of crime that yields these potential legal responses. Multimodal data such as recordings that capture policing in its context and over time, as well as a theoretical approach highlighting the situated nature of cognitive processes, is necessary to gain these insights. To demonstrate this we will first explore the relevant literature on Police Discretion as well as the literature describing the Theoretical and Methodological Framework used in this research. We will then present and discuss our results, going through four different action phases identified as comprising discretion as a situated practice. We conclude by highlighting key results and their relevance.

4.2.1. Police discretion

Discretion can be understood as the power to choose between different formal responses (or none-responses) to a legally recognised incident. This definition reflects a more classical administrative perspective on discretion (Davis, 1969). However, in this paper, discretion is understood to begin earlier and also to include the power to choose initially between formally responding to an incident based on legal categories or alternatively to engage in informal situated problem solving. This perspective also appreciates Goldstein's insight that much of police discretion is characterised by officers' power not to invoke the criminal process. This is particularly true for the lower front-line police ranks that enjoy 'low visibility' and lead Goldstein to argue that the police organisation is unique in that its lowest ranks enjoy the most discretion (Goldstein, 1960). However, Lustgarten (1986) argues that there are different forms of

discretion within the police. At the highest level it 'concerns the orientation and capability of the particular force as a whole' (Lustgarten, 1986 p. 19) while at lower levels it derives from the need to make speedy decisions that weigh up factors such as law enforcement, peace and public good will and cost of processing offences. Therefore, while discretion in the higher ranks derives from a mandate to strategically manage, discretion in the lower ranks derives from being in situ (Lustgarten, 1986). When officers are taught legislation so called 'points to prove' are highlighted. These are acts, characteristic of human relationships and mental states whose presence officers have to ascertain in order to be able to proceed with a situation as one that is covered by the respective legislation. To illustrate, the points to prove for theft are: (1) Dishonestly, (2) Appropriates, (3) Property, (4) Belonging to another, (5) With the intention to permanently deprive. If the officer can 'reasonably suspect' that all of these element are present the officer can deal with the incident as the offence 'theft', which permits arrest. Then more generally, Section 24 of the Police and Criminal Evidence Act 1984 is in the UK the most relevant piece of legislation with regard to the use of discretion by front-line officers. This section gives officers under broadly defined conditions the power to arrest without warrant for any arrestable offence. It is therefore an essential starting point for officers to initiate a formal criminal process. This paper concerns itself with this context dependent discretion of the lower ranks *in* situ.

The literature on police use of discretion does not always refer to discretion as such, but to problem-solving (Dejong et al., 2001), behaviour (Worden, 1989), decision-making (Coates et al., 2009, Schulenberg, 2010) or sometimes in terms of the officer's decision to (non)arrest (Chappell et al., 2006, Terrill and Paoline Iii, 2007), to stop a citizen (Alpert et al., 2005), to search, use force (Rydberg and Terrill, 2010) and so on. However, underlying all this research is an interest in officers' application of formal powers in concrete situations. The term discretion highlights the claim of authority to proceed both informally or formally with an incident, within legally and institutionally confined boundaries. Discretion has the greatest bearing on those who are on its receiving end. For this reason, much research narrows its focus to either the use of discretion in specific incident categories such as disorderly behaviour (Coates et al., 2009), traffic enforcement (Schafer and Mastrofski, 2005) and 'domestics'

(Robinson, 2000, Worden and Pollitz, 1984) or to policed groups such as youth (Schulenberg, 2010) and ethnic minorities (Alpert et al., 2005).

Rather than developing more holistic theories and frameworks, much of the quantitative criminological literature focuses on identifying isolated variables to explain the use of discretion. These variables can be grouped into individual-centred, organisational and circumstantial factors. Individual-centred factors refer to officers' mental qualities and behaviours of suspects, such as disrespectful or hostile demeanours (Worden and Shepard, 1996). Explanations for discretion may refer to ideals or cognitive schemata that officers have of policing (Mendias and Kehoe, 2006, Robinson, 2000), their attitudes (Wortley, 2003) or their education levels (Rydberg and Terrill, 2010). This line of study uses experiments, interviews and surveys as methods to elicit data. Organisational factors explain the use of discretion in terms of determinants such as departmental goals (Chappell et al., 2006) or administrative structures and directives (Worden, 1989). Here, surveys and police records are commonly used sources of data. Finally, *circumstantial* factors may refer to the larger neighbourhood context (Sun et al., 2008, Varano et al., 2009) but more often to immediate situational factors such as the number of individuals involved or the location of an incident (Carter, 2006, Riksheim and Chermak, 1993, Worden and Pollitz, 1984, Dejong et al., 2001). Observational methods are used to investigate all factors. The preference for observational research is appropriate for the study of a practice that involves attention not only to what is formally recorded but also to what is often informally solved on the spot (Black and Reiss, 1967). If policing were only about mechanically implementing the law, formal records would tell the entire story of what officers do; however, as this is not the case (Goldstein, 1960, LaFave and Wayne, 1962) we need to observe them in action.

Whilst there is some discussion about the relative significance of individual-centred, organisational and circumstantial factors, it is generally accepted that all of these are relevant to understanding discretion. However, no research has examined whether the relative significance of these factors shifts during the practice of discretion. The starting point of this paper is that use of discretion is a *process* of decision-making unfolding over time. Officers are confronted with 'messy' social situations and need to determine if a formal procedure is the best response. In this process, any concrete

situation that affords the use of discretion requires officers to interpret organisational and circumstantial factors during interactions with members of the public (MOP). Interpretation, however, presupposes that the situation has already been physically taken in by the officers' senses and, secondly, that the officers are conscious of and have thought about these sensory inputs (Gibson, 1966, von Uexküll, 1956). Only then can officers interpret a situation and apply discretion in choosing how they will act on the interpretation they have reached. The use of discretion is thus a Situated Practice (Engeström and Middleton, 1996, Greeno, 2006) in which situational and organisational factors are made sense of by officers and co-constructed with MOP.

However, it is challenging to theoretically frame and methodologically implement the exploration of the temporal as well as situate cognitive components of discretion. From a structuralist perspective Skolnick (1966) describes discretion as deriving from meso elements of policing role and context (authority, danger, pressure to produce), which in turn are structured by macro dimensions of policing such as rule of law or authoritarianism, democratic forms and political economies. Others such as Muir (1977) and Chatterton (1983) also sensitively trace complex unfolding dynamics of discretion over time. However, also these researchers stay somewhat vague in their explanations of discretion that often focus on culture. Rather than to provide concrete illustrations of how discretion is constructed they provide more abstract theorizations. Because it has been difficult to collect empirical material that captures the police work and allows its analysis and presentation in detail this is understandable. This is precisely where this research hopes to make a contribution by exploring BWV material within an appropriate methodological framework. Video is a real-time sequential medium (Knoblauch et al., 2006) and BWV captures perceptual input from the perspective of the officer. In the next section, the researcher will illustrate how these features can be exploited to investigate the situated and temporal distributed aspects of police discretion. Based on these considerations, this paper poses the question: How do officers use discretion to translate messy social situations into actionable incidents?

4.2.2. Theoretical and Methodological Framework

As noted above, the criminological literature on discretion tends to focus on identifying individual, organisational or situational variables that affect officers' decision-making, and less on integrating them into holistic models of police practice. Adopting a situated approach in combination with video-as-data is key in our effort to close this gap. It allows us to appreciate that in a moment of human practice the development of the practice itself, the development of the practitioners and the conduct of the activity come together not solely in the individual but in the entire workplace (Hutchins, 1995a). It therefore demands the analysis of individual, situational and organisational perspectives as one interlinked system displayed in police practice.

Some psychological theories such as Expectancy Motivation are used (Dejong et al., 2001) but there is still much scope in the psychological literature to theorise discretion. Mainstream psychological models exploring decision-making have moved from a purely rational choice perspective of analytical information processing, to models of bounded rationality (Newell and Simon, 1972), including the exploration of biases (Tversky and Kahneman, 1981) and use of heuristics (Gigerenzer, 2008). However, these models still focus on isolated individuals as loci of decision. Following Lewin (1935), Mead (1934), and (Vygotsky, 1978, Wertsch, 1985) the Situated Practice Approach (Suchman, 1987, Latour, 2005, Hutchins, 1995a, Lave, 1988) rests on a critique of the individualistic and experimental nature of these models of decision-making. According to these authors decisions are analysed as complex situated activities determined as much by contextual constraints as individual factors. Therefore, the Situated Practice Approach conceptualises decisions as the multi-layered engagement of an individual with social and cultural settings.

While Gollwitzer's Mindset Theory of Action Phases (MTAP) (Gollwitzer, 1990, Gollwitzer, 2011) is not usually considered part of the situated practice approach we argue that it can be used in conjunction with this approach and that doing so provides the crucial advantage of considering a temporal dimension in the analysis of situated practices. MTAP sits at the intersection of mainstream approaches and the Situated Practice critique. Most empirical support for this theory has been gathered in

experimental settings typical of individual-centred approaches, priming participants to induce mindsets to test if they concur with the theory. However, we suggest here that the theory is also a useful operationalisation for the study of naturalistic situated decision-making. Whilst experiments can provide important heuristic models for understanding cognitive processes, their potential to inform policy and practice are considerably increased when field studies of real-life situations, involving the detailed capture of naturally-occurring activity and its phases, complement them. What makes MTAP particularly relevant to this research is that it is one of the few theories that explicitly position decision-making on a temporal horizontal path. Goal-directed action is conceptualised in terms of four sequential phases, namely Pre-Decision, Post -Decision Pre-Action, Action and Post-Action. Three transition points, namely the making the decision, the initiation of respective actions and the conclusion of action mediate the pathways between each of these phases. Importantly, it is argued that each phase is associated with a specific mindset: deliberative, implemental, actional and evaluative, respectively. Therefore, the theory can provide a dynamic view on officer cognition under situational and organisational constraints during the use of discretion.

Despite some concerns raised regarding reactivity, recall and rationalisation (Mastrofski and Parks, 1990) video-as-data provides unique advantages (Jewitt, 2011) such as the opportunity to dissect the sequencing of tasks performed by officers in order to better understand their decisions. Video is a real-time sequential medium that maintains the temporal structure of human activity (Knoblauch et al., 2006 p. 19). Also, Goodwin (1994 p. 607) states that video allows repeated and detailed study of authentic communication and embodied work in its natural environment. The introduction of Body-Worn Video (BWV) technology to UK police forces (Home-Office, 2007a, Home-Office, 2007b) provides naturally-occurring data of officer activity. BWV are Subcam-like (Lahlou, 1999, Le Bellu et al., 2010, Lahlou, 2009, Lahlou, 2006) devices, which hold further advantages over classic video for data collection. They are light, small and do not occupy the officer's hands while filming. BWV follows head movements at eye level, capturing the general direction of officers' visual focus. BWV devices also have a microphone. Confronting officers with such multimodal recordings of their own activity allows them to share insights into their cognitive processes (Cranach, 1982, Cranach et al., 1985, Cranach and

Kalbermatten, 1982, Theureau, 2003, 1992, Vermersch, 1994, Omodei and McLenna, 1994, Omodei et al., 2005, Omodei et al., 2002, Lahlou, 2011a).

The use of self-confrontation is always geared towards eliciting introspective data, an essential but controversial aim in social science. Introspection is 'looking into our own minds and reporting what we there discover' (James, 1890 vol. I. p. 185). However, reporting awareness is not an easy task as it constantly changes in response to stimuli from our environment and runs with the associations it makes. Nisbett and Wilson reviewed several studies to conclude that 'there may be little or no direct introspective access to higher order cognitive processes' (Nisbett and Wilson, 1977 p. 231). Critical of this position, Howe (1991) counters that behaviouristic models are given preference over introspection not because of their explanatory power, but rather because explanations of behaviours in terms of stimuli response models that use supposedly objective external categories affirm the scientific self-understanding of psychology. A more moderate position might be that rather than arguing whether or not people have access to their cognitive processes (never or always), the debate should focus on the conditions that allow for such access (Smith and Miller, 1978). The psychological experiment has been developed from the very beginning to create such conditions. Wundt, the father of experimental psychology stipulated that the psychological experiment is designed to control the conditions that induce mental processes in order to make them observable (Wundt, 1904 p. 5).

To examine the phases of discretion, this research explores the potential for Subjective Evidence-Based Ethnography (SEBE) (Lahlou, 2011a) to increase our understanding of officers' real-world situated-cognitive processes (Latour, 2005, Hutchins, 1995a, Lave, 1988). SEBE, counter to conventional wisdom, locates knowledge not purely in our minds but also in what we *do*. Thinking is viewed as a process distributed between our brain and physical and social environments. Point-of-view recordings are used to interview officers about their situated cognitive processes in self-confrontation interviews. BWV provides data that capture policing in context, making it possible to use SEBE to study discretion. SEBE, unlike experiments, is not geared to isolate small aspects of the real world in an observational setting. Rather, it uses BWV-like devices to turn the entire real world that the subject is operating in into an observational setting. The argument is that, provided with the relevant cues

(self-confrontation with Subcam recordings), participants can provide detailed and grounded-in-evidence accounts of their mental processes (Lahlou, 2011a p. 611). We can note that during an experiment we simplify the world to make the observation of inner states possible to the subject. With SEBE we follow the same goal by doing the opposite, providing a great amount of detail to the subjects in order to enable them to recall accurately their stream of consciousness at the time of the recording. This difference is also what allows SEBE to explore and discover factors that influence activity in the real world with more external validity.

In the process of SEBE, two nested forms of data recordings – debriefing interviews (self-reported) and observation of activity (point-of-view recordings of practice) - are elicited and triangulated. This allows for the addressing of shortcomings that each form of data would have on its own. Self-reported data often struggles with validity and social desirability whilst with purely observational data it is difficult to ascribe intention to the subject. With self-confrontation, subjects describe their own intentions, however, in a more valid manner, as the description is specific to the situated time span of activity captured on BWV recording. Also, the link between action and cognition is established by the minuteness of observation and description of cognitive processes required by SEBE. Descriptions of cognition and observed behaviour can be interlinked to the level of one 24th of a second⁸. This is quite different from asking participants what they think about X in general in order to make broad arguments about their general behaviour towards X. One of the main achievements of the research reported in this paper is the author's access to naturallyoccurring audio-visual material capturing situated police practice and its exploration with an appropriate methodology. Neither the material nor the method has been used in the study of police discretion before.

4.2.3. Methods and Materials

The sampling of data is fundamentally dependent on the question – what is the unit of analysis? In this research the units are incidents of use of discretion by officers. However, SEBE depends on two forms of audio-visual data: the first documents

⁸ Assuming the usual 24 frames per second which today's video cameras usually record as a minimum.

practices in context (as captured with BWV recordings); the second documents cognitive processes at work during practice (as captured with self-confrontation interviews). The sampling in this research is consequently also the result of a compromise between sampling on a context level and sampling on a practitioner level. This need to compromise moved the sample away from meeting the 'gold standard' of being a random sample. However, the concept of such a random sample seems dubious in connection with this research on theoretical grounds (Bauer and Aarts, 2000). There is no concept of the 'population of police uses of discretion' that would need to be known in order to be able to draw such a sample to begin with. This research therefore does not aim to make inference from its findings to a larger population. The aim is rather to discover variety and patterns in officers' use of discretion.

It was not the researcher who asked the participants to wear BWV; they wore it because of internal developments in the police force. The BWV recordings are therefore secondary data. The London Metropolitan Police started to use BWV in September 2008 with approximately 40 EVEREC ME1 POL cameras issued to Response Teams as well as Safer Neighbourhood Teams. Recordings are stored on a stand-alone server and CARMA software from Reveal Media is used to manage the footage. According to reports generated by this software about 240 officers have uploaded about 3900 pieces of video footage with an average length of close to 9 minutes. For this research 16⁹ of these officers were interviewed about 24 incidents they had recorded.

For the analysis of these interviews, *Transana* (Woods and Dempster, 2011, Afitska, 2009) video analysis software was used. The software allows for the transcription of recordings with several transcripts synchronised with the video. This in turn allows the synchronous analysis of the video data and transcripts. BWV captures incidents including their temporal structure. BWV recordings in turn become the 'interview guide' for self-confrontation interviews. Consequently the transcripts of self-confrontation interviews are likely to follow the temporal structure of the original

⁹ 3 of the 16 officers were female, 2 of the interviews were conducted with Police Community Support Officers (PCSO) and the rest with either Police Constables (11) or Police Sergeants (3).

incident. Transana facilitates a number of coding procedures where each coding simultaneously makes reference to all synchronised recordings and transcripts. Crucially for this research, the coding can then be organised according to the temporal dimension provided by the video data. This research adopts Attride-Stirling's (2001) ordering of coding themes. She advocates that for the development of a coding frame, appropriately chunked empirical research findings are regarded as 'basic themes', which are then clustered within ever smaller numbers of 'organising themes' and 'global themes', with the latter summarising the research's key findings. However, the global themes in this research are based on theoretical consideration as suggested by Interpretative Thematic Analysis (Flick, 2009). The use of MTAP enabled the researcher to encompass a temporal dimension in his data analysis on a theoretical basis. The global themes reflected the four phases that form the progressive course of action stipulated by the theory. Therefore, the coding frame reflects a hypothesis about the temporal structure in the data brought about by the BWV recordings. Each global theme contains an organising theme that captures the officer's mind-set in each action phase. The global themes also contain organisational themes describing the changing functions that MOP serve for acting officers. The coding frame can be found in Appendix I. for more detail.

One concern with the use of video data is that it potentially focussed the researcher narrowly on short episodes of practice and thus runs the risk of taking them out of context. A recommended remedy for this issue is to combine the analysis of video with more 'big picture' methods such as documentary analysis or ethnography (Jewitt, 2011). For this reason the researcher also trained as a Special Constable himself and became a fully warranted officer. During his ethnographic research the researcher collected training material and documents that guide officer activity. However, insights from this research activity will not be the focus of this paper but only be used to corroborate findings of the SEBE analysis by linking them to the larger training, legal and operational framework officers operate in.

4.2.4. Results

This section uses Gollwitzer's framework to present a temporal account of situated use of discretion. For each of the four phases stipulated by the framework, we describe how officers' thinking processes and practices are shaped by situational and organisational constraints characteristic of policing.

In order to make it easier for the reader to follow the presentation of results we are going to use an illustrations from only one incident, in the hope that this will allow better appreciation of the progression of events. Focusing on a single incident we can provide more contextualising information. However, the observations we present draw from all our self-confrontation interviews and the selected incident may not always do this justice. What follows is a summary of the incident the officer provided after having been shown the first seconds of the BWV recording, a male constable in his thirties who recorded the incident:

This was just basically a call to what we thought is going to be a domestic disturbance at the property. We got there both parties if I remember correctly were heavily drunk. There was quite a bit of blood here there and everywhere. And I was dealing with this chap and I was with a female officer who dealt with the female [...]. The house was, to be polite about it, a bit messy - stuff all over the place [...] this guy basically had quite a bit of blood there on the top of his shirt, if I remember correctly. We are trying to establish what happened. So this guy is saying 'the dog jumped up and hit me in the face' and that is where the blood comes from and she was saying about the argument and I think she started getting a little bit aggressive towards the end [...]. Because we had no allegations we are in a tough spot. Even we can quite clearly see that something has happened. We haven't got a victim or an allegation. There is not much we can do. So the lady was being quite verbally abusive and quite loud so it was decided to arrest her under a breach of the peace. Which means she comes here gets to sleep it off. No more argument at the house anymore that night and hopefully once they both got some sleep and sobered up they go back and everything will be all right again. Fingers crossed. (Ian SEBE 5:07)

What the officer describes suggests that he is confronted with what in the criminal justice sector (CJS) is defined as a domestic abuse case or short 'domestic':

Any incident of threatening behaviour, violence or abuse (psychological, physical, sexual, financial or emotional) between adults aged 18 or over, who are or have been intimate partners regardless of gender or sexuality. It will also include family members who are defined as mother, father, son, daughter, brother, sister, grandparent, whether directly related in-laws or step family member (NPIA, 2011 p. 226).

In order to better appreciate the conduct of the officer in this example some information about police policy and guidance regarding domestics will be useful. There is also a large body of literature examining 'domestics' and the frequency and impact of arrest decisions in such cases on the different parties involved that we do not examine here (Hoyle, 1998; Sherman 1992). The CJS has adopted the position that domestic incidents leave victims particularly vulnerable and that they are therefore particularly likely to result in harm. Further, victims in domestic cases are less likely to seek prosecution (NPIA, 2011 p.225). For this reason the police have adopted a positive action policy. This means that in domestic incidents officers are directed to always arrest when they can legally do so (NPIA, 2011 p.222). It could therefore be argued that domestics present an exception to Lustgarten's (1986) observation about the under-enforcement of the law that is a prerequisite for discretion - in domestic situations when officers have the legal basis to act they usually also do so. At the same time with domestics it is more difficult to find grounds to enforce the law to begin with because of the likely lack of support by the victim in this endeavour. The tension that results from the attempts to restrict discretion with regard to domestics while such incidents also tend to provide less grounds for the police to act upon make them particularly suited to illustrate the complexities involved in applying discretion. This will become more apparent when we explore this case throughout the presentation of our results. When we do so we will refer in brackets to the type of incident specific video data we refer to. The name is the officer pseudonym, 'SEBE' indicates that the observation is based on the recording of the debriefing interview and 'BWV' indicates that it is based directly on the BWV footage of the recording. We will also provide the time on the recording that indicates the beginning of the moment we refer to in the format min:sec.

Pre-Decision Phase of Discretion

MTAP suggests that humans in the initial stage of a goal-striving activity aim to generate competing action plans and evaluate them according to their feasibility and desirability. To do so they seek information that allows them to judge the expected costs and benefits of each alternative (Gollwitzer, 1990). In exploring the first phase of use of discretion we make these rather abstract description more concrete by demonstrating that information-acquisition confronts street-level officers with three

interlinked dilemmas. We use this observation to argue that many police practices can be seen as strategies to overcome these dilemmas.

The first dilemma is the following: *Their profession requires officers to act but the nature of their practice routinely puts them into situations where they lack information to act on*. Officers are expected to act, and 'get things done' (Lipsky, 2010). They are repeatedly thrown into situations that they are then expected to control (Bittner, 2005). Officers cannot ignore messy and unclear social situations as is only human. This is illustrated in the quoted summary about the domestic disturbance provide above. There the officers elaborated that they continue to pursue the incident even though there is no allegation. Later the officer also points out that domestic incidents are a priority that he has to respond carefully:

We came to what is regarded as a domestic incident. Which is probably one of the most important [...] jobs we have on this borough [...]. The government, the police have all learned over the years from mistakes and now these things are big priority jobs. So you take as much time as it takes to deal with it [...] so you don't try to cut corners. (Ian SEBE 32:55)

The difficulty of this position is further aggravated by the fact that when officers are called to a scene the actions that could provide clues about the situation have usually already taken place. This is also illustrated in the initial quote. The officer comments that the blood is indicating that something has happened (for an indication of the visual clues available to the officer when attending the incidents see the images below: 'Separating'; 'Welcomed in') but they themselves have not seen what happened and nobody seems to be willing to provide accurate information.

In order to overcome this impasse there are a number of routines for informationacquisition at the organisational and individual levels. At an organisational level, operators who take '999' calls generate Computer Aided Dispatch (CAD) numbers and link them to information provided by the caller. Officers dispatched to respond to a call are provided with that information. If a minimal amount of initial information, such as name, licence plate number or address, is available, checks on the Police National Computer (PNC) can provide additional information including previous convictions, insurance status or open warrants. The officer also makes reference to this process in regards to the domestic incident: With this one something as simple as a phone call from a neighbour is probably more than likely for this one... you turn up to these things and yeah a couple has had an argument and that is all they have done and yet their name, address details all go onto a record as being domestic related in the past. It is like a tag on their property and on them ... because it comes from a neighbour not a victim we don't know what is happening - it could be anything. (Ian SEBE 13:03)

At the individual level, officers use what Dixon and colleagues call the incongruity procedure where information about individuals is inferred from the fact that 'they fail to fit into variable contexts of activity, place, and time considered to be normal' (Dixon et al., 1989 p. 185). In order to be able to apply this procedure officers need to fall back on their knowledge about the temporal fluctuation of policed events and the stock of experience they have built up that feeds into the notion of what is 'normal' in the area they police (Sacks, 1972).

The second dilemma impedes one of the most obvious ways to obtain information: asking. The dilemma here is that *officers are unlikely to be provided with accurate information about breaches of norms by those that have breached them.* In order to confront this second impasse officers judge a piece of information on its overall coherence with other information available and employ communicative strategies to validate or expose it as incorrect. Officers often cannot trust the information MOP provide them with (second dilemma) but *they need to balance confronting individuals who provide dubious information with the need to build a rapport with these individuals to maintain cooperation* (third dilemma). Challenging a MOP on information that is irrelevant to the incident only means losing the rapport by being confrontational without gaining anything. In an effort to cope with this dilemma, officers hesitate to challenge accounts from MOP. In the case of the domestic the officer suspects the man to be lying not to protect himself but his partner – which as already mentioned is often the case with domestics. When confronted with the footage of him talking to the male partner in the domestic incident the officer comments:

<u>Officer</u>: I don't know about you but all that showed quite straight forward to me that he was lying. Everything about his demeanour, the way he was talking when I asked him these questions. The fact that he is looking away, eyes shut his head away...¹⁰

¹⁰ We are not providing an image here because what is described could not be seen anymore after the face is blurred but the officer's account does concur with the BWV recording.

<u>Researcher</u>: So he seems to be lying to protect his girlfriend? – <u>Officer</u>: yes very much so which means he knows his way around a police station... obviously in one way shape or form, I am sure. He knows that when we are there the moment he says anything about an assault - hit, scratch, bite whatever the case, that she will be arrested immediately. We would ... have gone in and arrested her straight away... because of the way she was she is aggressive, drunk ... quite up and down and unstable in her behaviour. So all I needed was an allegation to get her arrested and get her out of there. (Ian SEBE 40:20)

Image 2: Separating (This image has been removed as the copyright is owned by another organisation)

As another coping strategy, if there are several MOP, officers are trained to separate them (NPIA, 2011) to obtain separate accounts (see Figure II Separating). This way, officers are more likely to be successful when they compare the accounts and look for inconsistencies. These may then provide them with clues for how to judge the information. Officers also make judgements about individuals' willingness to co-operate and their trustworthiness based on a number of dyadic categorisations such as intoxicated vs. sober, respectable citizen vs. regular customer or calm vs. aggravated. Signs of these categorisations can be found in the quote above when the officer points out that 'he knows his way around a police station' and also in the initial description of the incident where it is relevant to the officer to point out that 'both parties if I remember correctly were heavily drunk' (Ian SEBE 5:10) and that 'the lady was being quite verbally abusive and quite loud so it was decided to arrest her under a breach of the peace' (Ian SEBE 5:16).

Image 3: Welcomed in (This image has been removed as the copyright is owned by another organisation)

However, we argue that a more intriguing strategy officers use to compensate for lacking information is to judge reactions they elicit rather than the individuals themselves. Officers create layman's 'experiments' in which they themselves are the ever-same 'stimulus', and the ever-changing situation provides the other variables. In such 'experiments', officers watch for particular reactions they expect as possible responses to (their own) acts of policing. Officers know when and where to look for such responses because they have caused them many times before in other situations.

This strategy takes advantage of the fact that while officers often do not know the person in front of them, they are very knowledgeable about reactions they cause. To illustrate, the officer describes this process in reaction to the situation illustrated in Figure III Welcomed In:

So he just welcomed us in there. So you automatically feel - ok 50% safe ... others may open the door and walk away without saying a word but he has said come in. Saying that and doing that monition was like we are ok with him he is going to be all right. (Ian SEBE 17:03)

We are staying away from a discussion of whether or not the procedures heredescribed yield valid information. However, we will make some observations with regards to policing and the Pre-Decision Phase of discretion use. Firstly, most sources of information officers rely on are situational, with the exception of information provided by 999 operators and PNC inquiries. Secondly, officers judge situations against what is 'normal' based on experience of past situations, the reactions they caused in them, their knowledge of the environment and fluctuation of events (Dixon et al., 1989, Sacks, 1972). Thirdly, MOP are mainly approached as sources of information. This can be seen in both the judging of the information they prompt MOP to provide and in their habit of categorising MOP. Officers in this phase are open to most information that is provided to them by the situation and individuals involved. They are not yet focused on obtaining and validating specific information. This is also reflected in the police concept of a First Account (NPIA, 2011) which is given particular evidential status and understood to be the information that an individual wants to provide to the police immediately they enter the situation. Some officers suggest that often what information individuals choose to provide can be informative in itself. For that reason one officer who had cause to suspect that he was not necessarily told the truth still commented that: 'We are not going to say 'come on don't try pull the wool over our eyes' we want her to say exactly what she wants to say and record that' (Albert SEBE 14:02).

Officers often take decisions about what alternative path of action they proceed with moments after they attend an incident. Therefore, much of the information-acquisition and -processing described here can occur very quickly. While these are often not (yet) justified decisions it is not accurate to call them arbitrary. Kahneman (2011) argues that such quick thinking processes are much wider spread and not necessarily inferior

to slower more reasoned decisions. In the domestic incidents an intention to arrest the female partner is quickly formed and agreed on:

So I think that both of us subconsciously already decided who is coming with us but we have not discussed and decided fully. But subconsciously we are looking at each other in a way to say pffff looks like we are going to take the noisy one. (Ian SEBE 1:12:29).

We also suggest two interrelated reasons that make this form of intention forming even more likely in policing. Firstly, policing is a practice exercised under many constraints. Officers have to be able to justify any formal act of policing by relating it to the law, be attentive to health and safety risks and, at the same time, maintain an appearance of control (Manning, 1977). This means that from the outset, the number of alternatives officers can generate for dealing with a situation is limited. This constraint is further cemented by the fact that despite the diversity of situations that officers can be confronted with, there are relatively few formal behavioural responses officers can react with, such as arrests, fines, formal warnings and so on. Secondly, many of the situations are routine to the officers that attend them even if they are likely to be rare and extreme to the MOP involved. Officers are usually called if a situation requires immediate action but nobody knows what to do about it (Bittner and Bish, 1975). Therefore they have ample opportunity to become 'routinised' with situations that are out-of-routine for most people. Building up such experience enables officers to judge situations without actually obtaining and processing all information (Klein, 1993). This phenomenon is also explored in Cognitive Attractor theory (Lahlou, 1999). Nonetheless, as with all routinised judgements, officers run the risk of unconsciously relying on stereotypes in a situation that is different from what they interpret it to be.

Post-Decision Pre-Action Phase of Discretion

There can be a considerable time lapse between an officer's decision to proceed with a certain course of action and actually following it through. This observation is consistent with MTAP, which suggests that between decision and action there is a phase of planning. In this phase individuals focus on the when, where and how of action in order to identify an opportunity to act (Gollwitzer, 1990). In this section we will explore these processes as they are displayed in policing. However, we argue that during this phase, officers more importantly also engage in the exercise of constructing a social situation into an incident that is recognised by the Law.

A linear logic of discretion would suggest that if an officer is confronted with a social situation, each situation yields a necessary legal category and that each category yields one or a limited number of necessary formal responses (Davis, 1969). The officer would then only need to act out the formal response in an almost robotic fashion – discretion would only be in the choosing between formal responses, when several are available. However, law is abstract and general in that it is made not for a single specific incident but for incidents of a specific category. Bearing this in mind, discretion is also about the 'choice' of recognising, not recognising or continuing to search for and solicit the indicators that represent the abstract legal principle in the concrete situation. It is a process of attributing the unique incident to a defined idealtype. This in turn makes it possible that officers can reach a decision about how to proceed with an incident based on intuition and only then rationalise it by constructing formal grounds. In other words, we argue that policing is at least in part driven by efforts to connect a chosen formal policing response to an incident through flexible categorisation. Therefore, reasoning may occur backwards from the desired response and not only forwards from the observed incident. This is similar to what Garfinkel (1991) following Karl Mannheim describes as a retrospective-prospective from of interpretation. We are only able to identify is as such reasoning because we can compare the formal outcome of the situation (a retrospective account) with the recount of prospective thinking during the self-confrontation interview.

Practices that support the application of discretion in this nonlinear logic include communicative validation as well as the accentuation of, and probing for, information that gives formal grounds for a certain procedure. This is precisely information narrowed in on the acts, characteristics of human relationships and mental states that form the above-mentioned 'points to prove' that legislation is operationalised with. However, within the constraints created by the need to 'prove points' officers may also obtain the grounds for implementing a formal response not based on the formal categorisation that is the closest approximation of the officer's intuitional categorisation of a situation but by using the formal categorisation that is easiest to activate. To illustrate, the officer in the domestic incident recognises the situation as such but lacks the allegation of assault necessary to yield its legal recognition. The officer therefore mobilised another piece of legislation in order to get one of the two parties out of the house and prevent them from harming each other – the prescribed course of action for a domestic incident is implemented through other legal means. The following quote, drawn from the self-confrontation interview, which we argue, is a reconstruction of the officer's prospective thinking at the time illustrating this process:

This will be the moment at which I am thinking towards the fact that we cannot leave these two here but there are no allegation fffff. What am I going to do, what am I going to do ... they are drunk - Drunk and disorderly? No they are in private property. Public order? No. What offences can I do for public order where they are in their own property? In actual fact they are both together in their own property and we got no allegations or a victim so I cannot use public order either. What am I going to use here? We haven't got any domestic violence, because he has not made any allegations...We cannot take her in for swearing because it is not in a public place ... And so you are looking around and you are looking and you are looking and you need to try to think quickly... it is not to bend the rules, it is to find an inspiration almost, from something. ... So you try to find things, you use things around you ... And so you draw inspiration from things not to bend the rules. But there is just so much the law is so thick and so vast we can't remember everything straight away so we need to try draw inspiration from things, to use things to instigate our memory. (Ian SEBE 45:31)

Therefore the process of discretion draws on the extensiveness and ambiguity of the law (Lustgarten, 1986). Importantly, this law presents itself to the officer as a layer over the physical environment. The officer knows the operationalisations of legislation in the form of 'points to prove' but these are triggered and tested in interaction with the concrete situation, a process of Distributed Cognition (Hutchins, 1995a) that is typical for Situated Practices. The advantage of using SEBE for the analysis of policing is precisely in the potential to explicate how in police practice law becomes a set of lenses through which officers' interpreted the physical environment they are situated in. Cicourel (2009) illustrates that similar forms of reasoning that seek to bridge the gap between official practice, legal ambiguities, and actual judgmental practices continue throughout the criminal justice system.

Beyond being organisationally and physically situated policing is also here again situated in a temporal dimension. Officers carefully time the moment when they communicate their decision on how to proceed with a situation to MOP. Timing is a tactic that brings with it several advantages. Officers can (1) initiate interaction less confrontationally, to build rapport first; (2) use the time to judge whether a MOP poses a threat and will cooperate or not; (3) pay attention to the reaction of a MOP exactly when they provide the information, as discussed above; and (4) prepare for the procedure without being challenged by the MOP. They may call backup with a van to transport the individual to a police station, separate individuals, make the situation easier to control by manipulating the physical environment, obtain and cross-validate details etc. In this phase, officers will also set up their action in a manner that makes it easier to follow up on at consecutive stages. For example they usually match MOP and arresting officer by gender, which allows the officer to perform future procedures such as searching the arrested MOP when he or she is put in custody (the pairing by gender can also be observed in Figure I. and is not accidental).

There are two overarching observations about the Post-Decision Pre-Action Phase of applying discretion. Firstly, interaction with MOP is more deliberate than in the predecision phase because of officers' efforts to co-construct situations into formally recognised incidents by strategically interacting with MOP. Secondly, the emphasis on formal grounds reflects a focus on identifying and negotiating organisational constraints for the use of discretion, as opposed to what happens in the Pre-Decision Phase, when officers focus more on situational factors.

Action Phase of Discretion

When officers begin to implement formal acts of policing such as an arrest, MOP often adopt a more cooperative position in an attempt to persuade the officer of an alternative path. However, officers generally meet such efforts with comments such as 'time for talk is over', signalling that they will no longer consider new information. Again this is also occurring in the domestic incident, when the researcher asks about a dialog with the MOP captured on BWV the officer explains:

<u>Officer</u>: He is trying to talk her out ... of being arrested basically <u>Researcher</u>: But basically your mind is made up? <u>Officer</u>: Yeah, there is not much else that we can do really otherwise (Ian SEBE: 1:24:17)

What is interesting with regards to the quote above is also that the officer at this stage has convinced himself that there is 'not much else that we can do' other than arrest while previously he was desperately trying to evoke a reason to arrest. What this may suggest it that when officers have evoked a piece of legislation by highlighting the relevant points to prove, the situation gains a momentum of its own. That is to say that when legislation has been made relevant and thereby explicitly acknowledged to apply to the situation, then need to enforce the legislation has been created alongside it. The need to now act, according to one specified path, is also consistent with the mindset stipulated for the Action Phase by MTAP. 'The mind-set that facilitates the promotion of goal achievement is one of closed-mindedness to information that could trigger a re-evaluation of the goal that is pursued' (Gollwitzer, 1990 p. 66). This closed-mindedness may then also be further cemented by the fact that officers need to maintain an appearance of control (Manning, 1977). Doubting the validity of one's decision by considering additional information and potentially even going back on a decision made would run counter to this objective. Again we are only in a position to speculate about these processes because we are using SEBE within a Situated Practice framework, which encourages participants to continuously share their reasoning process within dynamically constructed institutional and physical situation.

Constraints also characterise the implementation of acts of policing. It has already been pointed out that during the first two phases officers identify situational and organisational constraints and prepare for them. In the Action Phase, organisational constraints become apparent in the specific procedures that officers have to follow when they enact formal responses. Arrests and searches, for example, are introduced by specific wordings and concluded with certain paperwork. Officers have to be careful to implement procedures in the correct way in order not to become the subject of complaints. Situational constraints mainly manifest themselves as potential threats in the physical environment, such as a narrow pavement, sharp objects within easy reach, or friends and family that could physically intervene on behalf of the arrested. This is also indicative of how, at this stage, officers perceive MOP mostly on the level of their physicality. This is because MOP are the 'objects' they act upon, so they have to consider whether they could, for example, physically resist an arrest or escape by running away. The officer in our example is similarly evaluating the person he decided to arrest:

Especially with someone like her she is so up and down and quite aggressive when she gets going and she is a bit unsteady of her feet. You tell her that she is going to be arrested and you just don't know what she is going to do. Some understand and give in but some of them just explode. (Ian SEBE 1:28:40)

Post-Action Phase of Discretion

Self-evaluation of officers' implementation of formal acts of policing is a function of earlier aspects of the process: firstly, the situational and organisational constraints made salient, and secondly, the categorising of social situations into legal incidents. Officers' evaluations of their recorded activity are consistent with the notion of policing being a practice characterised by its constraints (see second paper in this PhD). Officers evaluate their practices positively if they have 'done enough but not too much'. Therefore, officers do not aim to maximise one single criterion by which they could judge their practice, such as having been proactive or having established a good rapport. Rather, they seem to negotiate these competing demands and judge their practice on the quality of the compromise they reached. MTAP stipulates that the post-action phase of goal-striving is not oriented only towards evaluating implemented action but also towards establishing whether the action was implemented in the first place. However, discovering whether planned outcomes were actually attained with regards to formal acts of policing is not difficult. The process is centred on connecting a defined legal response to a complex, messy situation. Once this has been achieved, knowing when the formal response has been implemented is simple, precisely because it is formally defined. It is more difficult to determine the completion and evaluation of acts of informal policing such as cautioning or asking someone to stop specific behaviour. Officers only have the immediate reaction of the MOP by which to judge whether their action had the desired impact. When a MOP clearly reacts in a resistant manner, officers can be more insistent and threaten the MOP with acts of formal policing. However, when the individual reacts in a compliant manner, there is little they can do to predict what will happen once they leave the scene. For both the evaluation of formal and informal processes MOP are notably absent.

After applying all four phases stipulated by MTAP to policing practice we can make two overarching observations that both relate to the shifting relevance of situational, organisational and individual-centred factors in the process of discretion use. Firstly, in the Pre-Decision Phase, officers mainly draw information from situational factors in the 'messy' social situation they are attending. However, in the Post-Action Pre-Decision Phase, the focus is on developing the formal grounds that allow officers to implement their decision, which is an organisational factor. Information is collected and documented in a manner that solicits, constructs and highlights the 'points to prove' necessary to enact a specific piece of legislation which in turn justifies the actions stipulated by that piece of legislation. In the Action Phase, officers implement the course of action they have decided on within the situational and organisational constraints previously identified. Consequently, in the last phase, officers evaluate their action on the quality of the compromise they struck between the competing demands they were operating under. Secondly, the function of MOP and officers' interaction with them (individual-centred factors) change throughout the four phases. MOP are initially approached as sources of information that is taken in more or less passively by officers.¹¹ When they then need to develop formal grounds, officers' interaction with MOP becomes more strategic. During the actual action phase that follows, officers mainly assess MOP on a physical level, as they are the 'objects' they are acting upon. Finally, during the officers' evaluation of their actions, MOP are notably absent.

4.2.5. Conclusion

We have shown that discretion is a situated practice that unfolds over time. With SEBE we were able to solicit the development of officers' cognitive processes as they are triggered in response to BWV, footage that captures situational factors over time. In conjunction with the Situated Practice framework this allowed us to understand how law is installed through Distributed Cognitive processes as part of a concrete situation and how this installation then carries a momentum of its own. This

¹¹ That the information is taken in passively does not mean to suggest that the officer is necessarily passive at this stage. To the contrary, the officer may communicate actively to build up a rapport and/ or establish control. However, in such efforts, communication is relational and talk in itself is a goal as opposed to strategic communication at a later stage, which aims to communicate about something specific in a specific manner.

observation is at the core of our argument about the dynamic and procedural nature of discretion. Existing quantitative research has identified individual, situational and organisational factors that affect the use of discretion. Observational research explored the dynamic interaction between these factors but stayed somewhat vague because of a lack of sharable empirical data to point to. We suggest that the individual factors brought to a situation of disorder by officers shift as the mindsets associated with each phase of discretion shift. Further, situational and organisational factors are given varying amounts of attention by officers in each phase of discretion. These observations are based on the analysis of concrete incidents captured with BWV and we used the same video material also to illustrate our findings. In exploring the use of discretion as a process, we further challenged a purely linear understanding of it. Discretion is not only about choosing between different legal responses to an incident but also about having the power to construct an incident as being of a formally recognised category of crime that yields these potential legal responses. This is necessary because officers often take quick intuitive decisions about incidents and only then rationalise them by establishing corresponding legal grounds, a process that resonates with Kahnemann's (2003) observations about fast and slow thinking. However, this also means that giving officers the power to use discretion involves more than merely trusting them with making a responsible choice between alternatives for dealing with an incident of a specific legal category (the discernment aspect of the word discretion). Society also has to trust them with constructing (or not constructing) an incident as corresponding to a specific piece of legislation (that then may provide different a number of alternatives for dealing with the incident) in the first place.

Further, empirical application of the MTAP to a situated practice such as policing takes the theory out of the experimental setting and 'into the wild' (Hutchins, 1995a). However, this happens at the cost of a less systematic sampling procedure that prohibits inference about police practices outside the sample explored. Therefore, some research traditions would criticise this paper for its reliance on introspective data. Admittedly, research using this approach can benefit from eliciting additional data in more controlled settings. Such larger-scale research would allow more confidence in the reliability and validity of the results presented here. As it stands, this research is exploratory in nature, but justified by its introduction of an innovative and

analytically productive model for future research. We have shown how the use of SEBE methodology to analyse BWV recordings constitutes a new and useful tool to develop more holistic models of police activity. This approach allows research to pay due attention to the situated nature of policing – an essential component of practice that can escape research as it is difficult to capture. Results in the form of analysed BWV recordings could also be used as training tools for officers to explore and reflect on their practice. The analysis of different sequential phases of metal states in police practice does in this regard also point to aspects of this practice where officers' awareness and reflection may most improve how police interact with MOP during an incident. For example that current practice is designed in a manner that narrows officers' susceptibility to information from MOP after the initial pre-decision phase and that the evaluation in the post-action phase usually occurs without input from MOP seems problematic. We acknowledge that it may be difficult to change these dynamics, as they are a function of both the nature of interaction during policing and cognitive processes during activity. However, only when we are aware of these dynamics and their working can we start to determine if and how they may be changes. It is this awareness that we hope to have contributed to.

Appendix First Paper: Coding Frame¹² How do officers use discretion to turn messy social situations into actionable

incidents?

Global Theme (Temporal progression of action phases)	Organising Theme	Basic Theme	Example of a quote that would fit the Basic Theme		
	Making situational constraints salient Policing is about listening				
		•	-		
		Inducing talk	I just want to get a first account		
			whatever they tell me		
		'Intoxicated' vs. 'sober'	If you deal with somebody that is		
			drunk it brings all sorts of trouble -		
	MOP as source of information		he is incoherent and you cannot		
			trust what he says		
		'Bullshitting' vs. 'helpful'	She is giving me all the information I		
		MOP	need		
		'Respectable citizen' vs. 'regular customer'	There is family dirt		
		'Young' vs. 'old'	She is an elderly lady that up till		
Pre Decision			now only spoke to the police to		
			report a crime		
e D		'Calm' vs. 'aggravated'	He seems quite calm		
P		Information available before	The incident was called in by the		
		arriving at the incident.	female partner		
		Temporal fluctuations of	When you get a call at this time it is		
		types of policed incidents	usually a domestic		
		Information provided by	He has a criminal record		
	Situational	databases etc.			
	sources of	Information derived from	It is 11pm and there are lots of clubs		
	information	context of incident	here		
		Information inferred from	When I walked up to him he put his		
		individuals reaction to officer	hand on his pocket.		
		Coherence and	I don't believe him, when I asked		
		trustworthiness of	him to repeat his DOB he hesitated		
		information			

¹² The temporal progression of officer activity is explicit in global themes; the officer's mind-sets are implicit in org. and basic themes.

Taking dagisian		Netsberrichle			
Taking decision					
	Making organisational constraints salient				
		Reaffirming and highlighting relevant categories			
	(Constructing legal grounds	The description is quite vague		
	/	Actionable information	That is an accusation so we have		
			grounds to arrest		
	(Communicative validation/	So he hit you?		
	á	affirmation of actionable			
)hreekete2	information			
)brackets?-	Regular customer	Some people know the drill and you		
	nstructing		have to consider that		
	uation into	Perceived compliance of	He is immediately admitting to what		
inc	ident with	MOP to attempts of informal	he has done and apologising		
	MOP	policing			
		Perceived control of the	I could not actually stop them from		
	5	situation	running because he is a lot younger		
tion			than me		
Act		Perceived pressure to act	There are all these people around		
Pre		· · · · ·	us now so I am aware of how we		
ion			look		
Post Decision Pre Action		Call back-up			
at D			or talk is over'		
Ъ С С		Communicative control			
		Availability of back up	We are very close to a large police		
			station		
		Time pressure vs. need to	We cannot do anything before the		
Pro		wait	van is here		
	· . –	Gender	I have to be very careful not to be		
00	portunity –	Gender	left alone with a female suspect		
	en, where				
	-	Knock on officiat of continu	(male officer)		
i i i i i i i i i i i i i i i i i i i		Knock on effect of earlier	I asked the car to stop here but it		
	ć	acts of policing	creates all sorts of problems with		
			the traffic		
		Awareness of alternative	I could wait and call for dogs to		
	1	ways to proceed	search the car		
	–	Timing and sequencing acts	I wait till I tell him that he is going to		
	C	of policing	be arrested		

1 ···· ·· ··	· · · · •	·· · · · · · · · · · ·			
-	n 'crossing the Ri				
'time for talk is	over	Observable			
	Under salient Org. and Situational constraints				
Action	MOP as object	Ratio of officers: MOP	If there are too few officers you		
	that is acted		have to operate differently		
	upon	Individual vs. group of MOP	Groups are more difficult to control		
		Enacting formal procedure	s I have to give these wordings		
		robotic vs. 'natural'			
	Constraints:	Minimise potential for	or I just want to document that I did		
	Organisational	complaints of office	er everything right because complaints		
		misconduct	happen a lot and then my job is on		
			the line		
		Perceived treats of th	We are in the kitchen and there are		
	Constraints:	environment	lots of sharp objects		
	Situational	Hindering or conduciv	e There are so many streets leading		
	Charlona	affordances of th	e from this place so it's difficult to		
		environment	keep them together		
Co	mpletion of action	Potentially obser	vable but activity is continuous BWV not		
	Evaluation of activity under constraints \rightarrow quality of the compromise				
		Officer evaluating the	ir It went well we have done enough		
Post Action	Forms of	recorded activity	but not too much		
	evaluation	Formal follow-up paper work	I have to report this on form XYZ		
		Informal debrief / gossi	0/ We both felt uncomfortable in that		
		story telling	unhygienic flat		
		story telling	unhygienic flat		

4.3. Linking Statement First Paper

We can recall the first RQ of this work: What insight does a fine-grained analysis of first-person perspective audio-visual recording provide about police practice? In both the paper above and the following paper we explore how the relationship between officers and the environment illuminates policing. This is enabled by the fact that BWV is a very rich data format that captures much of the environment, as seen by the acting individual, in detail. In the previous paper the emphasis was on how officers over time interpret situations they police and how this process relates to an officer's use of discretion. Therefore, the focus was on the temporal structure as an organising element of policing, and how policed situations may become formally recognised incidents. Such an exploration has been enabled by the fact that video is a data format that maintains the original temporal and sequential order of the investigated empirical situation. While it needs to be acknowledged that significant differential interpretation of the 'same' video can occur resulting in bringing different frames of reference into existence (Campbell 1964) maintaining temporal order is still an advantage of video data that has not been explicitly acknowledged and made use of in the application of SEBE before. Further, using this data for self-confrontation interviews allowed us to explore the relationship between thoughts for actions as expressed in the interview and behaviour as captured on the BWV footage. The paper illustrated how this combination allows us to examine social psychological theories such as MTAP empirically, in natural settings (non-experimental), giving greater external validity to the effort.

Being able to investigate the mental representations that are made applicable to concrete situations also benefited the criminological agenda of this work. We illustrated that discretion is at least in part the construction of the situation to fit the abstract description provided by formalised institutions (legislation and organisational guidance) that officers hold as mental representations. In this manner, we expanded the conventional understanding of discretion and proposed that from this perspective, policing is less regulated than is generally conceived. In the following paper we are going to add to the argument by suggesting that officers do not only need to consider formal intuitional constraints when they police, but also the physical environment and the relational constraints of the social encounter they engage in. We will suggest that

we cannot judge what officers do based on only one of these dimensions but need to consider the compromise they strike between several demands.

5. Second Empirical Paper on Competing Demands

5.1. Introduction

Funding

This work was supported by the Economic and Social Research Council [Postgraduate Funding] and the Hans-Böckler Stiftung [Postgraduate Funding].

Abstract:

This paper considers the decision-making processes of police officers in the field. We analyse 27 real cases of intervention by officers of the London Metropolitan Police, recorded in first person perspective by miniature video-cameras worn by the officers themselves. Officers then participated in the analysis of the tapes. Police officers face cross constraints regarding efficiency, impression management, health and safety, and legal rules. A temporal dimension also appeared, with officers having to anticipate the sustainability of their course of action in the various dimensions above. Discretion appears to be essential: it has the functional value of relaxing constraints at one level in order to reach a better trade-off between contradicting demands.

5.2. Paper: Situated Police Officer Activity and Cross-Constraints: An Analysis of Video Data of Police Practice in the Field

Johannes Rieken, Saadi Lahlou

Officers have authority to use force; their actions can have serious implications for individuals and communities at the receiving end. Nonetheless, our understanding of what officers do on the ground is fragmented. Following any front line officer for even a short period will reveal that there is a myriad of offences that officers notice but do not pursue (see figure: Decision not to pursue offence). Also in some cases the officer may appear more severe than the law prescribes. In one incident we analysed for this research Nick (all names changed) is called to a domestic incident. He finds the couple drunk, the woman screaming and the man bleeding; but neither of them wants to make an allegation. Thus, stripped of any formal grounds to act on the assault that clearly occurred, Nick ultimately arrests the woman for 'breach of the peace' just to keep the two separated for the night and allow them to sober up. The law clearly played a role in this case but is not enough to comprehend the actions of the officer.

Image 4: Decision not to pursue offence



These imagis capture minor traffic offences. The motorbike on imgae A uses a lane reserved for cyclists and the cyclist in image B cycles in a pedestrian area. The officer even points these offeces out as they occur but judges that the means nessesary to follow up on them - running after the offenders and/or calling colleugeues are not justified.

The governance of the police gets much attention and is subject to debate but it focuses on law, regulation and policy. At the same time it is not contested that officers serve diverse roles and functions that are not written in law. Officers with changing governments

are regularly assigned new missions be it crime fighting (Home-Office, 1993), neighbourhood policing (Bullock, 2010) or reducing fear of crime. They are also the

subject to changes in regulations such as the Police and Criminal Evidence Act (PACE) or the current implementation of Crime Commissioners (Jones et al., 2012). Such changes create pressures and constraints for officers but they do not suffice to understand what they do. To argue the other extreme that law does not matter at all and what officers do is purely a function of their personality and the individuals and situations they encounter is equally unsatisfactory. However an integration of the two is missing. We understand diverse factors and roles that drive police practice on the ground. However, we lack a way of incorporating them in a theoretical manner that goes beyond detailed descriptions of single events or the statistical analysis of aggravated data that often escapes meaningful interpretation.

We therefore suggest that most can be gained from exploring what happens on the level of officer practice when abstract regulations collide with concrete situations and individuals. What constraints does the acting officer face in such a situation? How do these constraints present themselves to the officer and how does s/he navigate them? Focusing on such interplay of abstract and concrete constraints from the perceptive of the officer is what we propose to do in order to gain a grounded model of officer activity. We use the terms constraints, roles, and levels of activity interchangeably to move away from a discussion of any particular group of factors that impact the way an officer polices. This underscores the position of our approach that what we need to focus on are not factors in isolation but their interplay. Clearly, for such an approach we still need to identify constraints so that we then may explore how they relate to each other and how officers negotiate them. For the purpose of this paper we will therefore structure constraints of police activity into 3 broad categories - the institutional layer that comprises abstract law and regulations, the physical environment and the social encounter. This gives us conceptual categories that can be filled with concrete examples on an empirical level but also worked with theoretically.

Therefore, in the endeavour to understand officer practice we are aiming to introduce a meta-level. Instead of determining more factors that explain police activity we focus on factors that explain the interplay of these factors. It will become apparent that for this endeavour understanding the function and implementation of police discretion is essential. We will argue that the use of discretion is often about choosing a tractable set of constraints and demands that a policed situation presents to the officer. Secondly we propose that a deliberate alignment of constraints on a temporal dimension is another strategy officers use to act upon constraints. Situations attended by the police have their own characteristics and momentum. However, we suggest the skilful officers know how to nudge them in their favour.

The first section reviews the criminological literature on roles of the police and the social psychological work on cross-constraint decision-making. The second section presents the methods and material, which we used to study the multiple layers police practice considers in cases handled by police officers empirically. The third section identifies various layers of constraints and multiple goals considered by officers in the example of a *stop and search* incident that is examined in-depth. The fourth section proposes a framework that advocates an analysis of police activity as the interplay of multiple layers that officer's compromise between using discretion and alignment in time.

5.2.1. Theoretical Background

Policing as a multi-layered activity

The policing literature acknowledges that policing is more than simply enforcing rules. Goldstein (1960) demonstrated that the police regularly decide not to invoke the law even if they are confronted with clearly illegal activity. (LaFave and Wayne, 1962) elaborated on these findings to reveal that even if individuals are arrested, this is often done for a variety of reasons other than a strict enforcement of the law. In such a way, stripped of the illusion that what the police do is solely a function of the law, scholars began to identify multiple aspects and layers of policing. Bittner (Bittner, 2005, Bittner, 1967, Bittner and Bish, 1975) concurs that actual crime-fighting is only a fraction of what the police do, and goes on to argue that what characterises police activity is their authority and ability to coerce using force. He points out that this entitlement is often enough to control a situation. The police are therefore in the unique position of being able to impose immediate solutions to the constant flow of small conflicts, irregularities and problems that need to be dealt with in society: Whenever there is 'something-that-ought-not-to-be-happening-and-about-

which-someone-had-better-do-something-now!' (Bittner, 2005, p.161) it is a task for the police. According to Waddington, the activity of officers is largely about reaffirming their power. Waddington (1999b) conceptualizes policing as the exercise of force by the state in order to protect its interests. From this perspective, patrolling should be understood as asserting authority over territory (Walker, 1996). Waddington's work is also interesting as he provides a detailed micro level analysis of public order encounters. He points to the complexities involved in understanding police activity as such activity is embedded in a variety of frameworks such as legal and institutional (Ericson, 2007). These become relevant or silent depending on the circumstances.

The work cited above does of course not provide an exhaustive account of the criminological literature exploring what officers actually do. However, it serves to illustrate that policing is multi layered. These observations about the police resonate with the literature on professional roles more generally that shows that a given individual, in the course of their profession, may have to endorse different roles. For example, a physician may be required to act as a professional, a health advocate, a manager etc. (Frank and Danoff, 2007). Indeed, many of the arguments we make here about the police may also be relevant for other professions. What we like to highlight for now is that officer should act in several roles often at the same time, as an officer of the law, as a member of the Police organization (Ericson, 2007) , as a colleague and as brokers of procedural justice for citizens (Sunshine and Tyler, 2003). Their profession therefore inherently carries cross-constraints

Cross-constraints

There are inevitably contradictions between the various and independent systems of constraints, which one must face, in professional activity. Constraints that are contradictory in a given situation are 'cross constraints'. A typical example is productivity and safety. Speed usually induces risk and hence crosses with safety; safety usually induces costs and hence crosses with productivity. Pretending that cross constraints do not contradict and forbidding discussion of the issue creates 'double-bind'. A double-bind (Bateson et al., 1956, Sluzki and Veron, 1977) is a cross-constraint that the victim cannot make explicit, therefore experiencing a "restriction

syndrome" (Jackson, 1967), where people complain from being restricted in their action *and* from having to restrict others. In organizations, cross constraints are the normal situation, and they often transform into double-binds. Because constraints come from different entities (e.g. Human Resources on one hand and Finances on the other), those who give the constraints are not necessarily aware that they will cross with those given by someone else (Lahlou, 1998). For example, one part of the organization may request increase in quality while another cuts budgets and a third one allocates the work to untrained personnel. Arbitration has to be done at the point of delivery by the actors themselves; for the police that is when they attend an incident *in situ*, and inevitably their trade-off may appear 'wrong' to one of their principals. Cross-constraints will be relevant in our context because we have seen above that officers will have to deal simultaneously with several levels of constraints: what they are supposed to do by the book and what the situation requires in practice. While it seems in theory impossible to reconcile these various constraints, officers seem to manage in practice. We will see below in detail how this is done.

Prescribed action and actual action

Lucy Suchman discovered when studying in detail the work of accountants that, in fact, not a single one of the cases was processed exactly according to the prescribed procedure (Suchman, 1983). The nature of activity is rather to reach the goal (e.g. pay an invoice), with the constraint of respecting the rules, than to follow a rigid procedure. This is a more general truth about work. Also in ergonomics it is widely appreciated that *actual* activity is, in practice, almost always different from the prescribed. The prescribed task is what is supposed to be done, according to the procedure; the redefined task is what the operator ascribed to himself, having considered the local situation (because of a misunderstanding, or because the prescribed appears irrelevant or too difficult for the situation at hand); the actual task is what the operator really did finally (Leplat, 2000). This notion is relevant because here again, the actual activity can be different from what the officer 'is supposed to do'. This creates a dilemma: should one do what appears relevant in the situation, or what is in the manual? Some degree of professional discretion is necessary since no rule or procedure can encompass all situations. 'The professional must be able to play with the rules, the need to break them or redefine them, including technical rules and

theoretical certainties' (Perrenoud, 1994). It is therefore not surprising that discretion is the subject of much research in the study of the police.

Discretion in policing

Discretion is essential to understanding what the police do precisely because it provides officers with flexibility to define and align demands in the best workable manner. A classic administrative perspective on discretion would define it as the power to choose between different formal (non-) responses to a legally recognised incident (Davis, 1969). However, we have argued elsewhere (see first paper on discretion in this PhD) that officer exercised discretion in *framing* the situation. Discretion is already in the act of addressing an incident as belonging to one legal category and not another and not only in choosing between the formal responses the chosen category offers. The decision to (re)define the situation and to interpret the rules according to the case at hand is 'discretion'. The basis for the legal use of discretion in policing derives from the extensiveness and ambiguity of the law. Offences are broadly defined, which is then 'mitigated by "common sense" discretion not to prosecute' (Lustgarten, 1986 p. 15). Therefore, under-enforcement of the law becomes the norm, which provides the flexibility to respond to diverse situations (Lustgarten 1986).

The need for the use of discretion by front-line police officers derives from the need to make speedy decisions that weigh up factors such as law enforcement, peace, public good will and the cost of processing offences. Thus, police discretion derives from being *in situ* (Lustgarten, 1986) and since it is usually the lower ranks that are *in situ*, it has been argued that the police is a unique organisation in that discretion is higher at the lower end than at the upper end of the rank hierarchy (Goldstein, 1960). For that reason in this paper we focus on the on the ground policing activity of the lower rank.

We observed that policing like others professional activity requires officers to act on several levels at once. We noted that this theoretically could bring officers into intractable situations and found indication that in practice officers are likely to only succeed in this task when they can divert from the prescribed procedure. In policing discretion is precisely a formal acknowledgement of these informal processes. However, what we have not learned is how officers then implement discretion in practice. Research on the implementation of discretion focuses on factors that explain its use. This is a worthwhile endeavour that contributes to our understanding of phenomena such as disproportionality (Quinton, 2011), and the impact of policy changes (see Daniel Bear (forthcoming) for an illustration on the example of drug policy). However, by framing our analysis in terms of the requirement to negotiate and optimise compromises between the demands officer face we hope to gain a better understanding about the working of discretion in situated officer practice itself. Therefore we will suggest that police discretion is about allowing officers to weigh up the compromise they strike between the multiple dimensions of their activity. The more complex the situation, therefore the more dimensions it has and the more they contradict each other, the more discretion is necessary. This is because discretion allows in part defining and redefining the salient constraints in an incident or to possible even abandoning them completely. However, to demonstrate this we need a framework that allow to categorise constraints officers face on the empirical level but then also allows to think about the relationship of these categories theoretically.

Installation theory

As we noted there are many roles officers take for the purpose of this research it will be necessary to order them in a theoretically sound matter that demarcates and reduces the levels of an activity we explore but still provides a holistic view. For this purpose, the installation theory (Lahlou, 2008, 2010) framework is used to explore systematically three layers of determinants: affordances of the context, representations and habits, institutional rules. In a nutshell, installation theory considers that human action is made possible by the cultural *installation* of scaffoldings and nudging at three levels: the built physical environment, mental representations and learned routines in individuals, institutional rules in society. Social construction *installs* these three layers and individuals then rely upon them when acting. This accounts for the empirical observation that most activity is in fact performed by chaining chunks of routine sequences and interpretations -with limited use of deliberative judgement occurring at the articulation between action chunks, which is consistent with our status of 'cognitive misers' (Miller, 1956). Installation theory serves as a grid to

extract the most relevant elements or behavioural cues in each layer for any given action, by systematically asking what elements of each of the three levels were perceived or taken into account. One can then analyse long sequences of activity rather economically, and focus detailed coding only on the critical moments. Installation theory does not try to encompass all explanation: rather it sorts out the relevant factors for each event, which can eventually be further investigated within local disciplinary frameworks.

5.2.2. Method and Material

Capturing action, context and DM processes

Understanding the use of discretion requires accessing the perspective of the actor in a situation. How subjects act depends upon the context of action: 'cognition is situated' (Lave, 1988, Suchman, 1987). Our method aims at collecting the action, its context and the DM processes; in order to disentangle how digression processes emerge in context. It is difficult to get an ex-post accurate account of context driven activity processes - usually we only get reconstructions. The difficulty of accessing valid introspection is a major obstacle to any psychological study (James, 1890, Wundt, 1904). Fortunately, recent techniques of Subjective Evidence Based Ethnography (SEBE) (Lahlou, 2011) enable a major breakthrough. SEBE is based on the use of miniature video cameras worn at eye-level by the subjects ("subcams") (Lahlou, 1999, 2006). SEBE first provides a video stream of naturalistic activity data from a first-person perspective. A second stream of data (description of mental processes underlying action) is obtained by *replay interview* (RIW) protocols where the subjects are re-immersed in the situation by watching their own first-person perspective films and asked to comment on them with the researcher. This situated replay enables actors to access their episodic memory (Tulving, 2002) and describe their mental processes at the time (Lahlou, 2011). Replay interviews are also filmed, and analysed; then the final interpretation is discussed for validation with the subjects themselves. The technique will be described in more detail below. A major advantage of SEBE is that it is based on real world data and not on hypothetical discussions or decontextualized or simplified laboratory experiments.

By chance, the British Police has started using, for internal reasons, a device very similar to the subcam, called the Body-Worn Video (BWV) (Home-Office, 2007a, Home-Office, 2007b). This device is a camera worn at eye-level, which the officer switches on for overt evidence collection (the camera is not hidden and some officers may also wear a sign indicating that they are camera equipped). The BWV corpus, which was collected in actual policing situations, is therefore quite similar to the first stream necessary for SEBE (activity data). This paper is part of a larger PhD research project on policing which takes opportunistic advantage of this situation to apply SEBE to policing adding the second fold of SEBE to BWV recordings by organizing replay interviews with the officers that allow insights into the cognitive processes at work during the recorded activity.

Sampling strategy

The BWV recordings used here are secondary data: they were recorded in the course of natural policing, some even before this research began. The London Metropolitan Police started to use BWV in September 2008 with approximately 40 EVEREC ME1 POL cameras issued to Response Teams as well as Safer Neighbourhood Teams. Recordings are stored on a stand-alone server and CARMA software from Reveal Media is used to manage the footage. According to reports generated by this software about 240 officers have uploaded about 3900 pieces of video footage with an average length of close to 9 minutes. For this research 18 of these officers were interviewed about 27 incidents they had recorded between 2009 and 2013. We should mention here that interviewing as well as analysis benefitted from two other strands of this research, which is part of a larger PhD work. One of the authors (Rieken) became a Special Constable for the purpose of the research, therefore undergoing the whole training process and getting direct experience of police fieldwork. Also we set up an expert group of police officers from different forces, which met 5 times to discuss the issues linked to video recording of policing. As some insider knowledge helps building trust and understanding, the interviews were quite frank, informed and detailed.

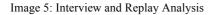
The research sampled officers who make intensive use of BWV (defined as having more than 50 recordings stored under their name). This pragmatic sampling decision

was made in order to be able to interview one officer about several incidents and have recordings where the use of BWV is less likely to have affected the officer's activity. These officers reported that they tend to record every incident they attend when using a BWV device. Hence it was assumed that as they are more relaxed and confident about the device they are also more likely to participate in an interview. The selection of footage for the RIWs from among the footage of officers heavily using BWV was guided by number of practical and theoretical considerations: the recordings need to capture actual human interaction (i.e. not solely an object that was criminally damaged); ethical considerations excluded footage showing, for example victims of rape or corpses.

We selected actively sought footage capturing moments where officers needed to improvise or react quickly to a deteriorating situation, and incidents that appeared to be challenging but particularly well managed. The rationale being that during such moments of breakdown and repair officers become particularly aware of their practice and do not just follow routines and should for that reason be able to better reflect and verbalise about their practice. Also, incidents where the BWV device was used to actively shape the interaction or became the object of it were included (in order to explore the potential effect of BWV on police practice that may affect the results of this research). Recordings that caught the interest of the researcher but required interviewing the filming officer for interpretation were included as well. Finally the length of the recording played a role in the selection process (not too long to be covered in an interview but long enough to be meaningful). As a result, out of 3900 recordings, 27, which were especially interesting by the above criteria, were selected and analysed; 18 different officers from the London Metropolitan Police recorded them. The three largest categories of analysed incidents were stop and search/account for with 7 incidents, public order with 6 incidents and domestic violence with 5 incidents.

Interview and Replay Analysis:

Previous work (Le Bellu, Lahlou, & Nosulenko, 2010; (Le Bellu, 2011)showed how First-Person Perspective (FPP) viewpoint provided by a subcam, and associated to a verbalization protocol in self-confrontation interview (Cranach, 1982; Theureau, 1992) or retrospective interview method (Crandall et al., 2006, Klein et al., 1989) enable the professionals to analyse an in-depth, realistic cognitive reconstruction process. Thanks to the episodic memory activated by subfilms, subjects can (re)access contextual aspects of events and reasoning processes. The interview process has many similarities with self-confrontation techniques in clinical interviews or ergonomic research (Clot et al., 2001, Theureau, 1992, Vermesch, 1990). One of the key focuses of the RIW is to discover the goals and motives of the subjects at the time a decision was made. We use here goals in the sense of Russian Activity Theory (Cranach et al., 1985, Kaptelinin et al., 1995, Leontév, 1979, Nosulenko and RABARDEL, 2007): a goal *is a conscious representation of the desired state* (Lahlou et al., 2012). In practice, we ask the subject what s/he was trying to achieve (or to avoid) when taking each specific action and what elements of the recorded situations s/he was considering in planning, implementing and evaluating it.





In RIW the researcher and the officer are sitting in front of a screen that displays the FPP tapes of the officer's activity (see image: Interview and Replay Analysis). The researcher and the officer often pause the video to explore in detail the situation. This specific type of RIW, because it is evidence-based, is much more inquisitive and

directive than classic interviews. In this manner RIW advances methods for the elicitation of cognitive processes and contributes to the debate regarding such data (Nisbett and Wilson, 1977, Smith and Miller, 1978). As opposed to unconstrained and unsupported introspective interviews that are prone to 'reconstruction' the video evidence focuses participants during a RIW to give an account of their specific mental processes during the concrete recorded activity. FPP recording provides very accurate evidence of what the officer did, saw and heard; because it is taken from the subject's perspective details that would not be visible with third-person perspective (e.g. action with hands) are captured at close range with great detail and with little ambiguity. Therefore the subject is left with very little possibility of 'reconstruction'. With RIW, subjects describe their own intentions, in a more valid manner, as the description is specific to the situated time span of activity captured on the BWV recording. The link between action and cognition is established by the minuteness of observation (BWV recording) and description of cognitive processes (RIW). Descriptions of cognition and observed behaviour can be interlinked to the level of one 25th of a second. This is quite different from asking participants what they think about X in general in order to make broad arguments about their general behaviour towards X.

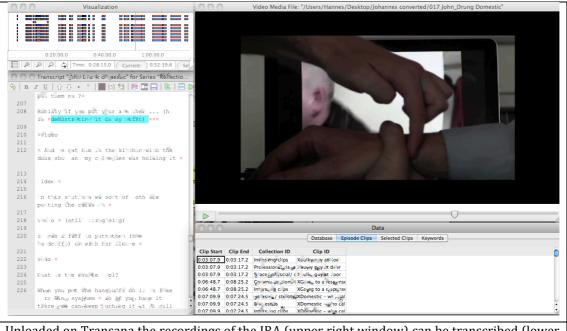
In order to avoid this RIW feeling like an interrogation, a series of techniques are used to enable trust and empowerment of the participant in the research process making clear why the research will have no impact on the participant's evaluation or career. For example, participants remain in full control over which data will be used, and the research is aimed at collecting best practices rather than exploring behaviour officers may be embarrassed about. We collect data about negative aspects of practice anyway because participants point at what problems they tried to avoid as well as what they tried to do and often spontaneously refer to cases where such mistakes happened.

<u>Analysis</u>

For the analysis of the RIWs, Transana (Woods and Dempster, 2011, Afitska, 2009) video analysis software was used. The software allows for the transcription of recordings with several transcripts synchronised with the videos. This in turn allows the synchronous analysis of the video data and transcripts. Transana facilitates a number of coding procedures where each coding simultaneously makes reference to

all synchronised recordings. Transcripts of BWV footage can run in parallel with transcripts of debriefing interviews concerning that BWV footage.

Image 6: Transana



Uploaded on Transana the recordings of the IRA (upper right window) can be transcribed (lower left window) and synchronised with the transcript (the turquoise highlighting indicates what part of the transcripts corresponds to the section of the recording). Finally, coding procedures are facilitated in the lower right window and different visualisations of video sound and already applied coding are available in the upper left window.

As this transcription and synchronisation process is labour intensive, the material was transcribed in several steps. In the first run-through the created 'transcript' would only contain a few descriptors and key ideas mentioned to reflect the flow of what was recorded. Their main purpose is to facilitate the navigation of the video to the transcript-linked video recording. This then allows us to continue with the analysis at the level of the richer multi-modal (Jewitt, 2008) data of video than purely at the level of text. Importantly, it maintained the temporal dimension of activity that is captured by video-as-data for the analysis. Subsequently selected episodes that particularly spoke to the research questions could be transcribed in more detail to be used in the write-up of the findings. The level of detail is determined by what *makes sense* for the subject, in their own natural categories of social representations (Moscovici, 2008). This is usually a larger grain than classic frame-by-frame video analysis (Heath et al., 2010). Once this is done, a global analysis of activity can be made without taking volumes. Therefore the transcription process itself is also already an analytical process.

5.2.3. Findings

For the clarity of demonstration and because of space limitations we will use here a single case to illustrate the findings, because this will enable us to investigate the sequentiality of actions, which is an important issue. Also we can set the scene, provide contextual information on relevant legislation and develop a narrative of events. Nevertheless the findings themselves are based on the analysis of the 28 cases and we kept only what was general in the findings of the whole sample but can be illustrated with the specific case. Where appropriate we will provide to the number of other cases that also displayed the identified activities. The incident we will use for illustration is a stop and search. There were 5 stop and searches and 2 stop and accounts in the sample. Stop and search and stop and account can be conceptualised as steps on a continuum of increasingly invasive police procedures. The formal guidance concerning stop and accounts are an attempted to regulate a common but unlike stop and search not by law empowered police procedure. Officers can initiate a conversation with anyone just like anybody else and in fact some may even find it pleasant and reassuring to talk to an officer in this manner, it therefore requires no documentation. However, as soon as an officer asked someone to account for their presence at a given location, which s/he can do without justification it becomes what is called a stop and account and the officer is required to document the incident. In 5 out of the 7 stops in the sample the officer initiated the search because of information received through the organisational level of the police such as 'intelligence' information circulated about suspects or current criminal activity in an area - rather than because the officer noticed something directly:

It was a car we had intelligence on. So there was a chance that they might have been drug dealing. It was like 20min to 9PM and they were seen in the area, but they don't live in the area. So we see them, we know the chaps, we have been doing some research on them previously. (Olivia, SEBE 02:45)

This is the initial description of a Stop and Search incident the officer (a female sergeant) provided at the outset of an RIW when asked by the researcher what will be seen on the BWV recording. We are going to examine the officer's account of this incident in more detail to provide illustrations of the multiple layers of policing that can become salient during a single incident and how officers negotiate them. Towards the end of the interview the officer summarises key constrains herself:

Like I said it's *safety* first. Then it's like the *legality*. Because stop and search you are always told it is one of the best tools you have got as an officer... they have given you this power you can use but you have got to make sure you stick to the rules. Otherwise you can get a complaint... If he then files a *complaint*... it would then be investigated and I may be suspended pending that investigation. There is a chance then that you lose your job for three people that you know are criminals (*Olivia SEBE 40: 30*).

Picking up on the constraints to policing listed in this quote we are going to discuss them in more detail. During the RIW, the various constraints of determination were highlighted. We collected them as they appeared, and then listed them all. For the convenience of the reader, they are presented below grouped according to the layers of installation theory. We will then use these constraints to build a grounded model of police discretion use.

We will first show how legal and procedural demands interplay with police practice (legality). In order to account for how policing is affected by the entire abstract body of rules that is induced to the concrete situation, we are not only focusing on the impact of legislation but also guidance, procedures and documentation requirements provided to the officers by the police as an organisation. This first layer is the layer of institutional rules stipulated by installation theory. We will then see the impact of the physical environment and how it shapes officer practice. The physical environment layer is particularly relevant to an officer's physical health and safety considerations (safety), which will therefore be the focus of the section. This refers to the layer of affordances of the context in installation theory. In the next step we will explore social relational considerations between the officer and MOP that the officer needs to be worried about, not least to avoid complaints. This involves face play, habits and strategies of presenting the self in social encounters, in the social psychological representations and practices layer defined by installation theory. We will as we pass see how these dimensions can have contradictory influences on officer behaviour, requiring officers to negotiate them with a variety of coping behaviours. Going beyond the instillation theory framework we will then examine the importance of the temporal progression and sequencing of events for practice. We will show that the tractability or intractability of a set of constraints is partly a function of their temporal alignment. For this purpose Image 7 provides an initial breakdown of the search procedure that we are going to examine in detail. The timeline on the left starts from

the moment the officer turns on her BWV device. The time for quotes from the BWV footage will therefore relate to this timeline.

Image 7: Duration and Progr	ession of Stop and	Search Procedure
-----------------------------	--------------------	------------------

Duration	Image	Description
20: 38:21 PM Time in:	No. Contraction of the second se	 Notices problematic position of the car Ask driver to step out Explains why she has stopped them Ask for documentation
0 min 20:38:41 PM Time in: 1:20		-Notices that he dos not make eye contact when responding to her questions - Announces search and pays attention to reaction - Other passengers are still in car which would give her an advantage if the situation escalates
20:40 PM Time in: 1:39	-E- EBSPELEP C	 Ask driver to step away from car and street for the search Ask colleague to do PNC checks on car and passengers while she searches
20:40:40 PM Time in: 2:19		- Wears gloves during search - Continues to talk while searching - Asks if they are going anywhere
20:41:55 PM Time in: 3:34	The Control of the Co	-Searches car - Is conscious about time (looks at her watch)
20:42:54 Time in: 4:33	Protocold F	-During search of the car she is conscious about traffic (ask colleagues to shied her from traffic during search)
20:47:54 PM Time in: 9:33	The Provide of G	 Searches other passengers Passengers complain about the duration of the search – responds that they said earlier when she asked (image D) that they where not going anywhere
20:51:51 PM Time in: 13:30	ala 2115.42	 Colleague informs her about result from PNC checks. She decides not to follow-up on information, as it is not immediately relevant, in order not to prolong the search further.
20:51:59 PM Total: 13:38		-Informs passengers that they are free to go. Unless they want to wait for the paper work.

Legality - legislation and Organisational Procedures

Stop and search is one of the most controversial and publicly scrutinised police procedures. In an effort to curb criticism and to ensure that officers act appropriately, stop and search is probably also one of the most heavily regulated routinely occurring elements of policing. In order for policing on the ground to result in searches that are legal, officers are taught and required to follow the mnemonic GO WISELY. Each letter stands for a requirement that an officer has to fulfil before s/he engages in the actual activity of searching someone. G stands for grounds and indicates the need for the officer to tell the MOP for what reason s/he is searching him or her. O stands for the object officer is looking for. W for Warrant card, is only relevant for officers that are not in uniform and refers to the requirement of officers to identify themselves as police to the individual they plan to search. 'I' stands for identity and S stands for Station indicating the need to not only indicate that they are officers but to also provide their name and at what police station they are based. L stands for legislation and implies that the officer has to state what legislation authorises the search. Finally, the Y stands for 'you are detained for the purpose of a search'. Without the officer stating this to the MOP the officer would have no legal justification to confront the MOP if s/he at some point during the search would just walk off or maybe a more likely scenario would run away when the officer is about to find an illegal item.

This list of requirements for a search to be legal illustrates that officers are tied into a fine-spun web of institutionally prescribed action when they engage in a search. In our example of the BWV recording we can see how the officer engages in the process of following the GO WISELY mnemonic:

I am going to search you and the vehicle, ok. Because obviously we have seen you go back and forth we have seen you this afternoon and now again and you don't even live in this area. (Olivia BWV 20:39:28 PM).

During the debriefing interview the officer explains the process and the grounds she is using in more detail:

Interviewer: So this is what you do you explain them what you going to do?

Olivia: Yes, that is by law as such. You have to tell him the grounds, what you are looking for and all the rest of the

procedures it's part of the law so you have to tell him that before you search... So that's what the grounds would be, 'that they hang in the area that they dart into windows'. I didn't tell him that I know the chap in the front but I would add that to my intelligence report. (Olivia SEBE 17:35)

Arguably, to 'hang in the area' and to 'dart into windows' are quite weak grounds to start searching someone. To act fully within the remit of the regulation the officer should have revealed that she has 'intelligence' on the driver and the car. However, in this case the officer does not want to disclose this information as she feels it could make it easier for the MOP to conceal illegal activities in the future by e.g. changing their car to one that is not known to the police. Therefore at times officers may not want to reveal information even if it would give legitimacy to their action from a legal perspective because it would harm other aims. This is an instance where we see how the legal constraint crosses with the efficacy constraint.

In this section we aimed to demonstrate that much of an officer's effort is focused on linking her or his activity with institutional rules that include not only the law but also organisational guidance and procedures. However, to anticipate the next sections, in fact the issue is more general than the crossing of constraints between the world of law and the world of action, as we will see, the officer has to operate simultaneously in several worlds, where his/her activity is 'performed' from a specific perspective and with specific consequences. These worlds are the world of physical action, the world of law/ the world of the Police organization and the social world. This gives us a more precise and local description of the layers that determine behaviour. While Installation theory provides 3 layers (physical environment, representations and practices, institutions): we see that in the policing case, the main institutions involved are Police organization and Justice; and that the representations involved are the ones that govern interpersonal relations. Installation theory predicts that the sustainable behaviours are the ones that fit well simultaneously in all three layers, but that it is possible to some extent to behave outside of this comfort zone. What we see here is that officers are forced to operate very often outside of this comfort zone.

Interplay of Policing with the Physical Environment

In the discussion of legislation and guidance as constraints of officer behaviour we implied another dimension of constraint – the immediate situation in the world of action. Much of the officers' challenge centres on the application of abstract rules to the immediate situation. The immediate situation constitutes constraints to officer activity independent of formal procedures. We do not mean to suggest that the immediate situation is captured completely by its physical characteristics, but it is an important component that we will focus on in this section.

An essential element of the analysis of the impact of the physical environment on officer practice is an examination of the constraint health and safety concerns present. These derive from the physical environment and its interpretation by the officer 13 . It probably does not come as a surprise that concerns about officer safety are at the core of their profession. During training officers are taught that 'everything and everybody that is not an identified risk is an unidentified risk'. While there is probably more emphasis on gauging the threat that MOP present, it can be noted that MOP usually only present a risk in relation to the environment (a strong, aggressive, drunk person that wants to fight the police but is locked up in the back of a van is not an immediate threat to officers) and the officer the MOP may present a threat to (if the officer is an even stronger and bigger person that has appropriate training the MOP may not present a threat even when s/he is not locked away). Therefore we would like to acknowledge that it is a somewhat artificial distinction when we look at threats that derive from the physical environment and later focus on the implications of human/ social factors. The two are part of a continuum with risk mainly deriving from the individuals involved or the physical environment at either end. In this section we will focus on the physical environment end of the spectrum.

In our example the officer identifies a potential risk already before the first word with anybody in the stopped car is spoken:

I was very conscious of where the vehicle was parked ... when you are going to search the vehicle and I made that decision already, that when you are going to open doors and stuff that you have a junction there. (Olivia SEBE 10:21)

¹³ Officers for example learn to interpret kitchens as dangerous environments. For a lay person a kitchen may be connected to more pleasant associations, however, officers focus on the fact that a kitchen usually contains many pointed and bladed objects that may be turned into weapons that can be used against them.

In essence the car stopped at an inconvenient spot on the side of a junction with traffic coming from two busy streets (see image: Position of the car).



Image 8: Position of the car

The screenshots show the problematic position of the car: Traffic and pedestrians passing in close proximity, the car is parked some distance away from the narrow walkway close to the junction.

While this may sound like a relatively minor problem, traffic accidents are actually the largest contributor of so-called 'line of duty death' far surpassing homicide as a cause (Police-Roll-of-Honour-Trust, 2013). As part of their profession officers have much exposure to potentially dangerous traffic. They are therefore well advised to be conscious of the risk it poses. In fact in 7 of the 28 incidents officers identified traffic as risk sometimes even when there was only an empty road. In our example, managing that risk has several knock-on effects for the conduct of the search. Firstly, because the officer stopped the car she has a duty of care for its occupants. Therefore, when she asks them to step out of the car and at the end of the search allows them to go back into the car, she has to make sure that they can do so safely. In the same manner secondly, the officer also has to be aware that the car does not present too much of a hazard for the traffic at the junction. Officers need to be conscious that the obstruction the policing activity they engage in imposes on society is warranted by its likely benefit. Taking some drug dealers and their product off the street may warrant some traffic congestion for a while but it is probably not worth a serious road traffic collision. Finally, during the search of the car itself the officer will be exposed to passing cars when searching the traffic facing side of the car. This puts her in danger

and could impact the quality of the search. The search may be more rushed on the traffic facing side, as the officer wants to minimise the time in the exposed position. In this incident the officer asks one of her colleague to have an eye on the traffic and shield her from it. Similar considerations of the physical situation come into play during the search of the car's occupants. The officer ask the MOP to change his position to be searched a good two minutes (20:40:39 BWV) into the search. When asked what her focus is on it this situation by the interview she comments (see also figure: Position of the car):

When it comes to searching people ... I tend to turn around... to cover my back and such... Also you got the narrow pavement, so you got lots of public still walking passed you ... quite a little area especially if you roll around on the floor where a junction is. (Olivia SEBE 21:58)

For the officer one problem with searching someone is that it puts her in a vulnerable position. This is why she likes to cover her back by tuning it towards the house front. Being close up to potential friends of the searched MOP (which is exacerbated by the narrow pavement) and potentially also crouching down to search the lower part of the trousers and shoes would allow the searched individual to attack the officer from an advantageous position, leaving her little time to react. This disadvantageous position is amplified by the fact that the officer is likely to be concentrated on searching and not on the searched individual and other car occupants that could choose to intervene. The proximity to traffic again also plays a part in the situation. The officer is considering that if the need to fight arises it could quickly expose her and the MOP to the passing cars.

The officer aims to manipulate the circumstances somewhat more in her favour in several ways: separating the person she is going to search from the rest of the group gives her more time should the others choose to intervene; having her back against the wall also means that she can afford to be less aware of her surroundings while maximising the distance between her and the road. Having repositioned, the officer takes two more steps to protect herself before starting to search: she puts latex gloves on and asks the MOP if he has anything in his pockets that she could hurt herself on. Giving the MOP the chance to inform the officer if he has anything that can harm her on him clearly makes it less likely that she will grab something sharp in his pocket such as a syringe if he chooses to inform her. However, similar to informing

individuals that they are detained as part of GO WISELY it also serves a legal purpose. If the MOP chooses not to inform her and she then is harmed by something in his pockets it allows her to argue that this was intended. Which turns an accident that the officer is responsible for (because she chooses to put her hands in his pockets) into an offence because the searched person did nothing to prevent this from happening when given an explicit opportunity. The question 'do you have anything sharp on you' before the search therefore serves a dual purpose of shifting both physical and legal constraints in the officer's favour. Part of another figuration of physical or social threats with respectively alternative physical or social responses can be illustrated with the officer's use of gloves for the search:

I always wear gloves. A lot of the times they go 'Why do you put gloves on?' If they ask me why I am doing it I say 'it is just to protect you from me and vice versa'... I may have dirty hands you don't want dirty hands in your pockets. (Olivia SEBE 22:58)

As we see, other people can be considered as part of the environment as they have dangerous affordances. In this example her use of latex gloves as an effort to protect herself from the physical environment creates a social relational issue as searched individuals take this easily as an insult. Possibly because putting on gloves is not only advantageous in this manner, only in 2 of the 5 examined searches do officers actually do so. In this incident anticipating this kind of emotional response to her management of threats from the physical environment, the officer has ready-made arguments available to disperse the insult and keep the relationship fluid.

This section showed how the environment, as a physical setting for the situation, brings a series of constraints, but also more generally affordances and connotations for action. The expert officer does rely on the affordances and connotations of the environment, regarding the current action but also the possible next phases (e.g. pointed objects in the kitchen or size of pavement in case the situation becomes tense; possibility of traffic making vehicle search difficult etc.). For example, during the search of the car the officer mentioned that the sheer size of the car is making her task of establishing if it contains any drugs much more difficult, however, that in itself does not put her in any more danger. Hence, the physical environment is about more than just threats but it is important to note that officers pay much effort to manage the safety of the environment as part of their practice. In sum, the physical environment is

a key layer of determination, and this comes especially through the categories of efficiency and safety. The same can be said about the social relational considerations. Officers need to be aware of this dimension to negotiate, gauge and mitigate the threat MOP pose to them. At the same time in these social interactions officers need to balance not just safety considerations, as will be explored in more detail in the next section.

Social Relational Considerations

When the officer finally commences the search she employs yet one more strategy:

I talk to them when I am searching as well. It distracts them when I have a go at their pockets and it makes it easier for me to find something because they are concentrating on what I am saying. (Olivia SEBE 19:19)

We mentioned earlier that the officer is at a potential disadvantage because searching distracts her while the MOP could prepare to attack her. Now talking forces the MOP to also be distracted and provides the officer with clues about the MOP from the tone of voice, potential hesitation and so on. On the BWV footage the MOP does not appear to be particular keen to talk in the only 25 seconds (starting 20:40:16) that Olivia physically searches she ask him 4 questions to which he only mumbles short responses. In the interview the officer made clear that she does not really process what is said but is rather interested in this kind of 'meta-information' that talk provides. The idea that it is good to keep people talking came up in the RIW of two other incidents as well. Further in every incident where communication was inhibited because the MOP did either not speak English or was intoxicated (4 incidents) did officers mention that not having talk available to build a relationship and gauge the MOP made the situation more difficult. In this example we can note that the officer works to again mitigate disadvantages stemming from the physical environment but this time not by manipulating that environment but through the social relational intervention of talk.

Social encounters are complex; this is true for police-MOP-encounters. Officers often step into the lives of MOP at a time when they are particularly vulnerable. Also being the subjects of policing can increase the urge to resist power and insist on one's social

status (Waddington, 1999b). These observations may particularly hold when the officer initiates the encounter. Officer-initiated encounters generally tend to be more resented than when officers are asked to intervene in a social situation by at least one of the MOP involved (Black and Reiss, 1967). Stop and search is a prime example of an officer-initiated encounter. Negotiating the aim and form of the encounter in our example, as well as what role each participant plays in it, is therefore a delicate matter. It requires careful communication by all available means to persuade and dominate the MOP and manage the situation. At the same time officers are required to also keep sight of the need for long-term cooperation with and the goodwill of the public. Therefore, police-MOP encounters can be challenging and constitute a range of competing demands, placing officers in dilemmas that require much skill to be negotiated. In this section we are going to focus on the techniques officers employ to this end.

With the first instant of communication the officer in our example is already deliberately framing the encounter. 'When you get them out of the vehicle then they are already knowing that it is more than just a 'can you put your seatbelt on'... I will need to speak to you further' (Olivia SEBE 7:57). Therefore, she is establishing the gravity of the situation – that requires to be taken seriously by the MOP (see image A figure: Duration and Progression of Stop and Search Procedure). Interestingly, in this instance the officer employs a nonverbal mode of communication (Bezemer and Jewitt, 2010) as she attributes specific meaning to the act of 'getting them out of the vehicle' that she expects to be understood by the MOP.

Officers comment that taking control of a situation is important to their work. To some extent it is a form of impression management, to signal order and peace to MOP the police need to be seen to be in control. Making someone do something early in an interaction, with noncompliance not being an option, can establish and affirm a specific relationship – a relationship where the officer can tell the MOP what to do and hence is in control. For this purpose officers may also ask a MOP 'to step over here!' in order to talk to them separately, or request an individual to 'keep your hand out of your pockets' for officer safety (see image C figure: Duration and Progression of Stop and Search Procedure). Such little acts of confusing and dominating are subtle strategies of control. They are part of 'framing' the situation in order to make best

use of social representations, that is learned interpretations that MOP will mobilize in this context (e.g. Police must be obeyed).

Officers' use of such subtle strategies of control could be observed in 19 more incidents. Sometimes MOP would also adopt positions such as facing against a wall and spreading their arms out against it unsolicited and officers would comment that while they would not require such a behaviour they do not stop it as it strengthens their position. That MOP adopt such positions unrequested may be interpreted to suggest that they accept the officers framing of the situation and therefore behave accordingly. In 6 out of the 8 incidents where no such strategies of framing were employed the situation did not require for the officer to dominate. The two cases this leaves are interesting in their own right. To illustrate, in one of them a Police Community Support officer (PCSO) is confronted with a suspected shoplifter who had considerable experience with the police. The use of force does always need to be 'reasonable' (i.e. necessary and proportionate) this is the same for citizens, police officers and PCSOs. However, police officers have more powers that can be backed up by such reasonable force then PCSOs that operate on similar level then citizens. Moreover officers also have the training and equipment to use force, which arguably makes their threats to use it more credible. That the suspected shoplifter is aware of the status of PCSOs puts the officer in a position where he cannot assert himself and is fully dependent on voluntary cooperation. As a consequence he ends up in the rather embarrassing situation of walking behind the MOP through busy streets repeatedly asking him to stop until a PC comes to his assistance. In the second case a PC initiated a search that turns out to be vigorously resented by the MOP. Because the search is taking place on arguably weak grounds, is of a category that is particularly criticised in public debate (the MOP is of an ethnic minority) and recorded with BWV, the officer has arguably put himself in a very weak position. Consequently he catches every opportunity to appear congenial for the rest of the encounter and not look racist.

Nonetheless, MOP will often offer to take on the role of 'the person in charge' to the officer attending an incident. On a more practical level stepping up to that role makes it easier for the officer to impose interpretations and solutions onto messy social situations. It requires generally less resources when a resolution is accepted on the

base of the authority of an officer than because of the physical force the police has assembled or the formal processes that have been initiated. Finally, officers usually join on-going social situations later in the process and therefore have an information disadvantage. Therefore, they have to judge on limited information the intention of the individuals present including if they are dangerous. In such situations of doubt it can be advantageous to have a persona of control and 'not to be messed with' to discourage a situation from 'kicking off' (Skolnick, 1966).

That is not to say that officers solely aim to dominate MOP throughout their interaction. An essential goal of interaction is to induce MOP to cooperate and comply. Cooperation is a key variable that shapes the quality of the encounter and the effectiveness of the police (Tyler and Huo, 2002, Sunshine and Tyler, 2003). While it characterises the job of the police that under specific circumstances they can physically force solutions upon incidents, doing so is a last resort (Newburn, 2005, Waddington, 1999b). Doing so for every incident would be practically impossible. Further, there are also a number of other reasons why officers may like to maintain a cooperative atmosphere: to reduce threat, to make their work more comfortable, to improve the quality of the encounter. Therefore, it is in the officers' interest to maintain a cooperative atmosphere and not appear to be too questioning, sceptical and hard-headed. Thus, the need to appear in charge on the one hand and the need to encourage cooperative behaviour on the other hand both characterise policing and require careful balancing.

An important variable for deciding where to place that balance in a concrete situation appears to be the relative group size of officers to MOP and their respective potential to intervene:

I was on my own with one PCSO I think. So I was the only officer... in that sort of situation you almost build a rapport with that person first instead of saying 'I am going to stop and search you'. Because then they go 'what, what' and don't understand what is happening. So you build a rapport as such and tell him what you have discovered and see what sort of answers they will give you. (Olivia SEBE 4:35)

In this case there are three young men in the car and there is only one police constable, with PCSOs. As described above PCSOs have little formal power to use force. Therefore, the officer is aware that she would ultimately not be in a strong

position to physically enforce the search if it came to it14. She therefore, takes a softer approach aiming to ease the MOP into accepting her decision to encourage his cooperation. However, there are also other communicative strategies for this kind of situation officers employ that aim more at controlling such as bluffing. Officers may verbally display a level of control that they could not physically back up. In these situations the verbal command tends to be put forward particularly forcefully as if to compensate for its lack of physical backing. An example of such bluffing is found on footage of a public order incident, on the BWV the recoding officer verbally and with a insistent tone of voice comments a protester that potentially has committed an offence and starts walking off to stop. The officer commented that because of his heavy bulletproof vest he would not be able to chase the individual up effectively and that this was exactly the reason for the tone of his voice. Such strategies could be observed in 4 incidents in total and seemed particular popular with PCSOs which may not be surprising as they do not have the formal power of warranted officers but most MOP do not know the difference between the two – when they do the situation becomes much more difficult for PCSOs as the incident with the suspected shoplifter illustrated above.

This section showed how representations are a resource for the police officer. By mobilizing existing social representations (Moscovici, 2008) in their MOP counterparts, officers frame the situation and control action; they also have to acct according to social representations. Indeed the layer of representations contains both resources and/or constraints –and this is also true of other layers. At the same time officers themselves have a number of representations about certain constellations of social situation that they respond to with ready respond to with activity patterns they have readily available and can implement with ease also in potentially stressful situations.

¹⁴ A parallel could be drawn to Holdaway's (1983) observation about the potential benefit for officers needing to talk themselves out of situations in order to make them less repressive (made in connection to the implementation of radios into policing that allowed officers to just call back-up rather than to persuade MOP).

Timing and Sequencing

When we now illustrate the relevance of the medium of time that the so far explored intuitional, physical and social constraints are evolving in we also step outside the installation theory framework we used for analysis. Nevertheless the relevance of time is very salient in the data.

We may differentiate between the moments an officer takes the decision to implement a certain procedure and the moments s/he implements them (Gollwitzer, 2011). The RIW suggest that there is often a considerable time lapse between the two and that officers can be quite strategic and deliberate in revealing their decision to the MOP that it refers to. Timing is a tactic that brings with it several advantages (1) Officers can initiate interaction with something less confrontational, making cooperation more likely. A simple example of this is a traffic officer that stopped a speeding car and asks the driver if he knows why he stopped him. Often the driver will respond along the lines of 'because I was speeding' thus, perhaps unintentionally admitting to the officer his offence. However, if instead the officer would have started with, 'you were speeding and now I will give you a ticket for that' it is more likely that the driver would contest or at least not admit as readily that s/he was.

(2) Officers have time to form a better impression of whether the MOP will cooperate or not. (3) Officers can prepare to pay particular attention to the reaction of a MOP exactly when they provide that information (as shown below). (4) Officers can prepare for the procedure without being challenged by the MOP. They may call backup with a van to transport the individual to a police station, separate individuals, make the situation easier to control by manipulating the physical environment, obtain and cross validate details etc. The strategic timing of actions for at least one of these reasons could be found in 10 incidents and virtually every time officers requested a van to transport an MOP. The soundness of such an approach became apparent in one incident where officers cancelled a van they initially requested because they thought they would not need to arrest anybody after all. However, then the MOP did unexpectedly 'kick off' and a struggle to handcuff him followed. This stretched out a socially awkward situation of being in the home of someone you just fought and that you continue to restrain till the van arrives. Within an encounter there are moments that provide more information about the intentions of the other and/or are more crucial for the path the interaction will take. Being attuned and anticipating these moments allows officers to better judge and be prepared for acts of the MOP:

So as soon as you say you are going to search the vehicle you are looking for that reaction. Sometimes they go 'no you are not going to search' and then you got another situation. (Olivia SEBE 12:52)

The officer expanded that in moments such as the described she pays deliberate attention not only to the verbal response but also physical reaction. If for example the MOP had shown nervousness immediately after the announcement of the search she would have called and waited for backup before searching. The rationale being that the MOP behaviour is likely to be a reaction to the officer's action. Because announcing formal procedures (in this case a search, however, arrests are prepared in a similar manner) creates a moment from which the situation could develop in several different manners so officers prepare for strong adverse reactions. Therefore, at this point the officer had already moved the MOP away from his friends and made sure that she is advantageously positioned if she had to fight. Officers often rely on this from experience about the reactions they elicit and the pace at which an incident can develop. The use of this strategy is made explicit in at least 10 of the incidents also particularly when it comes to announcing arrest decisions as this is a moment that officers judge to be particularly critical. The exceptions are arrests where MOP are either already aggressive or intoxicated to the level that they are incapacitated. In the former officers already know that they have 'kicked off' and in the latter that there is no danger of them doing so.

The MOP may have an information advantage about his/her own intentions but officers are usually much more experienced about the general processes of their practice and have seen MOP react to it many times¹⁵. This is exactly what allows them to judge when in a policing procedure acts of MOP are particularly telling and what they may imply. This strategy could be described as a layman's experiment where officers themselves are the ever-same 'stimuli in changing conditions. Officers

¹⁵ This advantage is reduced during interaction with MOP that have more experience with the police; one reason why these interactions tend to be more challenging for officers.

are the only component that is constant in all the incidents they are ever called to. Spoken more generally officers try to infer something about the nature of the incident from the different reactions their constancy elicits. Officers know when and where to look for a reaction and what it may imply because they have caused them many times before in other situations. They may see a person for the first time but they are reacted to as officers all the time. What is important to highlight is that such experiments operate on the basis that officers cause the very behaviour they judge.

Focusing on the sequential aspect, that is part of any physical activity, also for the analysis of policing procedures helps to understand certain acts as anticipation of possible occurrences. As opposed to the logic of space, which is that of relative positioning, sequencing occurs within the logic of time (Bezemer and Jewitt, 2010). We may even argue that, analogous to the physical environment, time provides its own constraints and affordances to officer practice:

Already it [had] taken that long and I am very conscious of the time. Because although you have the legal power to stop them it is always good to be expeditious to make sure you are not creating any more issues for yourself ... create like tension and such. (Olivia SEBE 33: 47)

In our example time works against the officer, as over time the level of cooperation is lowering. To expand on this theme further, the officer mentioned that because of the sheer size of the car she knew from the very beginning that she could not be certain that there are no drugs in it even after she searched. She also suggested that calling for a police dog trained to search for drugs would make it much more likely to find drugs if they were in the car. However, she never considered calling a dog unit because at that time of the day they are in high demand and therefore difficult to get and even if she could get one it would take too long for them to get there considering the need to maintain a cooperative atmosphere. The time the situation occurred and the time it would take to continue with that specific path therefore precluded an otherwise feasible option that arguably would have made for more thorough policing. However, there are other examples of incidents where with the passing of time the position of the officer improves – an officer waiting for back up to arrive or an officer dealing with an drunk MOP that will only sober-up over time etc.

Officers are not just the subjects of time but take an active role to make it work in their favour or at least mitigate its potential negative effects. It is their knowledge about the sequencing of acts, their durations and when key moments in a procedure are likely to occur that give officers agency within the momentum of a situation. Talk is also in this regard an important tool. Controlling the pace of a conversation can allow officers to slow down the progression of events on the level of the social encounter in order to align it with aims on other level. In another incident where the participating countable was still quite inexperienced he was waiting to announce an arrest till a police van arrived and for that purpose tried to keep the MOP entertained with chitchat. However, he quickly runs out of things to say. When asked after the debriefing if he would do anything different during such an incident now he responded. 'I have more to talk about and I deal with it differently. I seemed to be waiting for the inevitable while my colleague seemed a lot more in control of it' (Jack SEBE 1:06:21). In other words incidents have their own momentum and require certain acts and interactions but the experienced officer knows how to time and align them in her favour and for this purpose talk is essential. Olivia displays awareness about such dynamics when the driver of the searched car voices annoyance over the duration of the search about five minutes into is (20:47:24 PM) when she comments on it as follows:

It takes some time to search a vehicle and he is then getting agitated that we are wasting his time because obviously he knows there is nothing in there... But I said to him at the beginning, which I usually do 'this is going to take a few minutes we are going to search you and the vehicle'. So they can already see it will take a little while. That is obviously why I brought up the point: 'you told me you were not going anywhere. Now you are telling me you are going'. (Olivia SEBE 32:14)

The quote illustrates that the officer is aware at the very beginning of the search that she is likely to lose cooperation over time. Probably having experienced many times that MOP become argumentative because of the length of an average search, she developed the strategy of asking them if they are under time pressure, early in the process, at a time when they are still cooperative. This gives her something she can counter with when later in the search the expected arguing about the duration of the search actually occurs. We have seen more formal examples of this earlier with regards to the practice of informing MOP that they are detained and asking them if they have anything sharp on them before a search. What this illustrates is that skilful officers have awareness about the potential outcomes of their procedures. Notably, officers are then not only working on manipulating the process in a manner that makes positive outcomes more likely but are as focused on avoiding negative outcomes or at least mitigating their impact.

With the discussion of different constraints in policing namely legal, physical and relational we aimed to illustrate that it is likely that at any given moment during a policing procedure officers are pursuing goals on different dimensions that follow their own logic. The dimensions we choose to explore are somewhat arbitrary, could be grouped differently and be added to. However, as we stated at the outset our aim was not to provide an all-encompassing portrayal of policing. Rather we wanted to provide an empirical framework that allows us to discuss the effect of contradicting demands in policing. What the discussion of the temporal medium these demands evolve in illustrated was that social (e.g. loss of cooperation over time), intuitional (e.g. timing of the fulfilment of the requirement to inform MOP about procedures) and physical (e.g. not calling a dog unit because it would take too long) constraints evolve within time and are a function of it. Situations have a momentum of their own on each of the 3 levels of installation theory but when officers are aware about their potential unfolding officer have strategies to nudge each of them and align them in a manner that is conducive to their practice.

5.2.4. Discussion: Handling cross-constraints

We illustrated that the contradicting demands faced by officers are the result of having to make quick decisions, in incomplete information: in practice there is necessity to 'solve the problem' in the world of action while meeting constraints on 3 levels: institutional setting, physical setting and social setting. Many of the institutional norms are unusually explicit as they derive from the legal system and the regulations of the Police (respecting procedures). Strategies officers use to cope with the institutional dimension include framing the situation into a known procedure, and interpreting the situation ex-post in documentation.

The physical setting brings affordances especially for the safety and efficiency of policing. The physical surrounding is not only a constraint to the officer but can also be an enabler with invitation for actions and solutions for problems. This is precisely what Gibson noted about the fact that an environment is perceived through its affordances (Gibson, 1950, Gibson, 1963, Gibson, 1967, Gibson, 1986); because these properties of the environment are learned, the notion of connotations of activity (von Uexküll, 1956), that is why activity is evoked by the object, is most useful. In fact, the context may be ambiguous and support several potential activities (e.g. ignore, issue verbal warning, arrest, etc.) so the activity the subject finally engages into also depends on internal motivational states and the congruence of connotations of activity with the current goals and motives. For example, if an officer is engaged in an important case, s/he will not stop to address a traffic violation, although the situation in itself could afford this.

Cognitive attractors theory predicts that in such situation there is not a conscious deliberation: the subject engages in the activity on the basis of salience, cognitive cost and potential value of the result (Lahlou, 2000, 2010). In the perspective of the dual process theory, there are two systems of decision-making: system 2 is explicit conscious reasoning, while system 1 is intuition (Kahneman, 2003). Embodied cognition (Wilson, 2002) provides insights into how the reactions of the subject will be not only the result of disembodied mental processes, but rather of a complete body that has senses, emotions, and kinaesthetic awareness. In a fight for example, there is clearly more at stake than mere reasoning. The importance of experience and training to perform the kind of multifaceted police practice described in this work is apparent. The role of the information pool culture provides in these cognitive processes is well illustrated by D'Andrade (1981). The stop and search case shows that the situations handled are so complex that conscious reasoning would be too laborious and slow. Therefore officers have to heavily rely on System 1 and training. Further, typically, outside of stop and search, or rounds, in interventions officers would arrive on site after the situation has already started in some way. Officers are in the classic cognitive situation of 'incomplete information', and have to take decisions anyway and fast. As Simon has shown in the general case, decision-making is then often made with procedural rationality. 'Problem solving by recognition, by heuristic search, and by pattern recognition and extrapolation are examples of rational adaptation to

complex task environments that take appropriate account of computational limitations – of bounded rationality. They are not optimizing techniques, but methods for arriving at satisfactory solutions with modest amounts of computation' (Simon, 1990 p.11). Therefore, the wide spread case of reactive and less structured policed incidents is even more reliant on System 1 and procedures.

Officers' experience (direct or through training) about how the potential of physical affordances may play out is crucial in order for them to manipulate the situation in their favour often in an anticipating manner. Provided examples of such coping strategies included the use of the 'anything sharp on you' question and the deliberate moving and separating of individuals and objects spatially. Finally on the social level we identified the need to maintain control over the situation by maintaining the appropriate balance between strategies that aim at dominating MOP or at inducing them to cooperate. Essential, strategies for this endeavour mentioned include the deliberate presentation of the self as officer to elicit reactions that provide clues.

Therefore, we have illustrated that there are different layers to policing on which officers pursue different goals with varying practice. At times one strategy can be conducive to aims on more than one level of practice. The 'anything sharp on you' question for example also improved both the safety of the officer on the physical level and the officer's legal standing on the intuitional level. But this cannot be said about all acts that present intentional acts of policing. Therefore, officers more often alternate between acts that pursue goals on different levels. It is for that reason that without an appreciation of the multiple levels and goals of policing it would appear to be somewhat fractured, arbitrary and contradicting activity. This may appear so from an external perspective, but certainly not so from the subjective perspective of the actor, who is juggling to keep several parallel processes running (action, social interaction, legal process etc.) with occasional cross-constraints. What we can learn from this observation for good policing is that an officer needs to be aware of and to be able to interpret the moments that provide clues about the need to change priority between different pursued goals. The officer in our stop and search incident for example knew to pay particular attention when she announced the search to the MOP and would have become more preoccupied about her safety had the MOP displayed signs of nervousness. Therefore, mastering the time sequencing constraints appears to be a very important aspect of policing expertise.

We can understand from this analysis why discretion is an essential part of policing. Clearly on some level every incident is unique. However, in order for officers to be able to rely on their training and experience of past situations they have to be able recognise the general principle in a situation. Elsewhere (First paper in this PhD) we have argued that precisely this process of making the abstract principle salient implies active framing and co-contracting of the situation that should be seen as an extension of classical conceptualisations of discretion. We can now see that such discretion is crucial to enable solving the situation while meeting the constraints of the institutional layer. Discretion enables the officer to make acceptable trade-offs between otherwise incompatible goals. It releases some constraints on one dimension just enough to enable matching constraints on another. The discretion to reframe the situation is here essential, It allows the officer to choose to qualify the situation in a specific way e.g. to consider the domestic violence call mentioned in the introduction as a 'breach of the peace'. This is another way of empowering the officer to transform the contradictory set of constraints into one that is tractable in the world of action. Considering that case as one of domestic violence would not have enabled the officers to separate the partners who were likely to fight again, because of the legal constraint (one MOP must make an allegation); while as a Breach of the Peace case this constraint disappears. This reframing of the situation by the officer is therefore a creative solution to a difficult topological problem of inventing a course of action that is both efficient and legal.

Negotiating the temporal dimension of attended incident is another key aspect of police activity. Anticipation is typical of seasoned officers. The reason for many behaviours is not in the momentary situation itself, but because having done that could become useful a few steps of action down the line. Experts typically anticipate possible situations and take advanced precautions to prepare, or to prevent them. While novices often get caught in irreversible or difficult situations which could have been prevented if anticipated. Experts know by training or experience how to avoid engaging in a route, which leads to irreversible or difficult situations. However, performing police activity is not just about anticipating the trajectory of only one

route of activity -e.g. the consequences of the presence or absence of a specific factor - but rather about managing the co-occurrence, evolvement and interplay of such factors on the institutional, physical and social level. Installation theory predicts that the sustainable behaviours are the ones that fit well simultaneously in all three layers, but what we have found with regards to officer activity is that this requires for them to 'align in time' elements coming from different layers to allow action. For example, the can should be called at such a time that it arrives shortly after arrest. Officers have developed practices to manipulate progression in a manner that makes precisely such activity-enabling alignment more likely. For this officers develop a sense of awareness about the parallel development of constraints and nudge, and how they develop, at what stage of evolvement they are, how they relates to what may happens on other stages. Examining such interplay is what illuminates police activity beyond the identification of relevant factors. In a way, the skills of monitoring thee alignment of several aspects of the task that develop in parallel is similar to cooking: a good cook will manage to have the meat, the vegetable and the sauce ready and hot at the same time, although they have different cooking times and necessitate each a series of operations that must be run in multitasking.

Throughout the paper we saw that following one goal will sometimes work against reaching a goal on another dimension; e.g. clashes between following legal procedure (as became apparent when the officer choose not to disclose the intelligence she had on the MOP car) and efficiency and safety (as was illustrated by the implications putting gloves on for a search can have). We argue that such situations of crossconstraints officer performance should not be judged on the achievement on one single dimension but rather on the quality of the compromise between them. We suggested that precisely this quality of the compromise is often reflected in the use of discretion as it implies the choice of constrains the officer made salient. We also need to be aware that when we judge police performance, it is usually post hoc and with hindsight. But the compromises officers must make are always result of judgements made in situ – they are made at a particular place and crucially at a particular time within a progression of events. We have highlighted the importance of the temporal progression and sequencing of events for practice, which add both time-pressure and sequential constraints. A situation has a momentum of its own on all identified levels of officer practice, but usually with different pace and duration of events; so the skill

is in aligning them in a manner that again optimises the compromise between them. In this endeavour many strategies are precautions because officers need to act under conditions of uncertainty. Given that officers must focus so much of their effort on the temporal component of their activity it would be misleading to discount its relevance when police actions are evaluated after the fact.

5.2.5. Conclusion

Based on analysis of first-person recordings of an officer's actual activity, obtained through wearable miniature cameras worn by the officers themselves in the course of duty, we proposed an analysis of police activity as the interplay of institutional, physical and social layers that officer's compromises between using discretion and alignment in time. While such compromising may be the case in any professional activity, the nature of policing makes it critical and especially difficult because policing typically operates in situations that require immediate action (Bittner, 2005) under cross-constraints. Furthermore officers act under pressure to maintain an appearance of control (Manning, 1977) and adherence to due process – as they are charged to uphold the law they need to be seen to operate by it in order to maintain legitimacy. In order to illustrate this we used empirical cases to demonstrate the different layers of officer decision-making and how they regularly face crossconstraints. A specific problem with policing is that, since officers are supposed to respect the law exactly, no compromise is allowed –so discretion, which is precisely admitting there are crossed constraints, is often seen as problematic and contested .In fact some jurisdictions such as the US with its 'three-strikes' law try to under certain conditions eradicate discretion altogether. In such case, the crossed constraints become double-binds (Sluzki & Veron, 1971).

Step by step analysis of the tapes investigated three dimensions of constraints: physical environment, institutional rules, representations and practice. Analysis confirmed police officers face cross-constraints in concrete situations and must continuously make trade-offs. We showed how these cross-constraints regard mainly efficiency, impression management, health and safety, and legal rules. This research came to the conclusion that the conditions that the police meet are often contradictory. While not contesting the need to safeguard against officers' abuse of their powers we

point to the importance of doing so prudently in a manner that understands and values the role of discretion in managing contradiction. We further argued that officers must anticipate and actively manage the sustainability of their course of action *in parallel* in the various dimensions above, as in the cooking metaphor. All this suggests that policing is a highly complex activity that requires considerable experience to be done properly. We therefore would like to conclude by highlight the interesting potential of using the BWV tapes to understand and improve policing. Experiential learning based on evidence of real cases lived in the first-person perspective, as those provided by the BWV and studied in this paper, can provide officers with cognitive maps of problem spaces, and create sensitivity towards, the pace and duration with which situations unfold on different levels, potential decision points for which levels of activity have to be aligned and associated trade-offs between them rather than singleroute prescriptions to address incidents.

5.3. Linking Statement Second Paper

An essential aim of the paper above was to animate the importance of the social and physical qualities of the situation for an understanding of practice. This effort is at the core of the 3 key contributions this PhD aims to make: firstly, a criminological argument about the use of discretion by officers; secondly, the application of social psychological theory to an empirical practice; and finally, the advancement of video methods that allow an appropriate appreciation of situational factors in human activity. We will briefly elaborate on the contribution of the above paper to each of these points to make explicit the link between this paper and the overall research agenda of the PhD.

Firstly, following our criminological interest, we tried to understand the reason behind the discrepancy between actual and publicly perceived levels of formal discretion. We argued that the need to negotiate the demands of the immediate suggests that officers are not only bound by the law, but also by constraints of the physical and social situation they are attending. Because those that judge the quality of policing are usually not in situ they are less likely to appreciate these situated factors to the full extent. This can lead to a position where officers need to maintain an appearance of control and adherence to due process to effectively assure the public and have legitimacy when in fact the situation is ambivalent. We suggest that having discretion not only to choose between different responses to a defined situation, but to coconstruct that situation in the first place, gives officers a chance to balance out the competing demands of the concrete situation and the abstract judging audience. In the next paper we turn to explore the effects of the spread of camera mediated visibility on policing. We will argue that this development may not only create transparency, but potentially also circumstances where officers more than ever attend to an abstract audience in the immediate situation, which in turn is likely to be to the detriment of the quality of policing then and there 16 .

¹⁶ We are aware of the difficulty to evaluate what good policing is in a manner that all stakeholders would accept (Bordeuer, 1998). That the definition of good policing will be contested becomes evident when considering the policing of public protests or some of the problematic relationships of the police with marginalized groups. On this level evaluation of the police require abstract discussion about the state of society and its values. For our effort it is therefore important to establish from the outset that

Secondly, following the social psychological agenda, the need to understand practice in the context of several constraints and their interplay is at the heart of the situated approach (Latour, 2005, Lahlou, 2008a). To illustrate the appropriateness of these insights for the practice of policing not only advances criminological theory, but social theory more generally. It contributes to the understanding that it is interplay between different dimensions of the relevant factors of an activity that creates systems that underlie activity: moving back and forth between the pursuit of different goals and compromise between them; following norms and historical practices, not only in an abstract sense but also in the interaction with culturally shaped environments and objects; understanding encounters as developing over time with static, habitual and self-expressional elements. Therefore, the paper aimed at providing an illustration of the benefit of appreciating social practices in their complexity and in a situationallyenacted manner.

Thirdly, an approach that appreciates such complexity needs to be equipped with methods that allow the capture of its details. This is where this paper illustrated that the use of SEBE can be a useful tool to explore the relationship of activity to the physical and social environments. Video data, including first-person perspective video data, is increasingly available for many forms of human practice. To learn how to draw on these for research can therefore unleash a great potential to gain insight into real world human practices in their complexity. The mixed methods approach adopted in the paper, combining video research with ethnography, is promising in this regard as it allows the researcher to develop the means to contextualise the video material, ask relevant questions during the self-confrontation interview and hence better interpret the material. Moreover, this paper illustrated that research can draw on existing video material that was not originally elicited for research – as is the case with BWV. However, it is then all the more important to reflect on the impact of the

we are rather interested in quality as reflected in what officers in terms of their personality, focus and ability brings to concrete situations and how then these individuals in context are able or not to respond to the situations with appropriate and capable actions. Of course to establish what is 'appropriate' again requires a normative perspective. However, the underlying argument is that an understanding of the immediate and situational allows us to approach the issue from a different perspective.

organisational elicitation process on the practices that are recorded. Fortunately, such reflection then serves the dual purpose of improving the methodological soundness of the research as well as improving our understanding of the real-world social phenomena that the material results from. It is also this dual purpose that is pursued in the next paper where we explore how the introduction of visibility increasing technology such as BWV impacts on policing.

6. Third Empirical Paper on Digitally Mediated Seeing and Visibility

6.1. Introduction

Funding

This work was supported by the Economic and Social Research Council [Postgraduate Funding] and the Hans-Böckler Stiftung [Postgraduate Funding].

Abstract:

The following paper addresses how the introduction of visibility increasing technology such as BWV may impact policing. It does so by exploring BWV as part of a larger process, the spreading of camera mediated seeing and visibility and its potential impact on current practices in policing – policing's New Visibility (Goldsmith, 2010). Using point of view recordings from 18 officers for self-confrontation interviews, we first illustrate the core relevance of seeing and visibility as two sides of one perceptual exchange in policing. We then demonstrate that this new visibility affects both police procedures and interactions with members of the public. Moreover, the study highlights that BWV affects activity on both sides. We conclude by speculating on some of the effects this may have on the quality of policing and the relationship between the public and the police. Central aspect, are that New Visibility make it too apparent to those evaluating police activity that the police operate in an inherently ambiguous space which undermines officers' efforts to manage the appearance of due process and control necessary for their legitimacy and ability to operate.

6.2. Paper: The Effect of (Camera Mediated) Seeing and (New) Visibility on Policing Practice

This paper contributes to the literature on visibility and seeing as central to police practice. Managing how the public perceives the police is a core consideration of police practice (Manning, 1977), where being seen to be in charge signals and feeds into 'keeping the peace'. We argue that a number of socio-technological changes have impacted the visibility of the police to then explore the effect of these changes on micro-level police practices is explored. This criminological issue is addressed by employing social psychological theory and methods. Crucially, Body-Worn Video data, in itself contributing to the 'New Visibility' of the police, is analysed to gain insight about these potential changes to policing.

Taking the starting point that being a professional body comes with a certain way of seeing events – a 'professional vision' (Goodwin, 1994) - it will be shown that there can be a mismatch between public and police perceptions of an incident¹⁷. For example, in a situation where five officers constrain one individual, the police interpretation may be that they are ensuring the safety of the constrained individual, while the public perception might involve that of is an oppressive act. This mismatch is amplified through new visibility-increasing technologies (such as hand-held mobile devices) and their usages (including dissemination through social media) that in turn decontextualise events and vastly increase their potential audience. This is also likely to contribute to the increase in public complaints about police practice by the public (IPCC, 2012). At the same time the officers may now be criticised for previous practices that were not criticized because what they do is seen by a different audience and in a different context. In other words, policing procedures that used to be unchallenged parts of policing may not be taken for granted anymore, making officers more uncertain about the status of their actions, which in turn may make them more risk adverse in an effort to avoid criticism and litigation.

¹⁷ Even that is an oversimplification as also within these groups there is great variation in the interpretation of recorded events (Lawrence, 2000; Doyle, 2003; Doyle et al, 2012; Kahan; 2008). In this paper we focus on the public/ police distinction because it allows us to highlight how a body of knowledge that characterizes a specific professional group such as the police may play into these interpretations.

The paper will first with a review of the current literature on visibility and seeing and their role in professional practices, especially policing. The relevant theoretical background for the methodology employed in this paper is provided before the actual method and data itself is introduced. The findings and their discussion are presented in four sections: 'Seeing and Visibility as existing parts of police practice', 'the impact of new visibility on police procedures', 'the impact of new visibility on police procedures', 'the impact of new visibility'. The paper concludes by highlighting some of the core findings and implications of the research and emphasise the need to develop a more critical and reflective practice towards the use of video evidence.

6.2.1. Theoretical Background

Visibility and seeing are two sides of one perceptual exchange. To see someone makes us aware that we usually can also be seen by that someone. To see that we are seen – being visible – in turn induces self-regulation. This relationship is modified when we are recorded with a camera because it makes us aware that how we behave now may be seen by an audience at a different time and a different place. However, we cannot in the same way see that audience or know when they see us. The equal relationship of 'I see a concrete you and you see me here and now' becomes a onesided abstract 'you can see how I am now potentially anywhere and anytime'. Working with this observation, Brighenti (2007) develops three categories of visibility relevant to relational, strategic or procedural aspects of social interaction: firstly, visibility that is linked to recognition, argued to be an enabling resource. Secondly, visibility produced by media involves a process that takes subjects out of their original environment and propels them into another context with its own norms and logics. Thirdly, visibility can entail a form of control when it becomes surveillance. This last category seems to be the most relevant in regards to policing (Norris, 2002) as policing is about mechanisms of social control (Reiner, 2010)¹⁸. For example many police practices such as the use of uniforms and strategies such as

¹⁸ Clearly Reiner's position is more elaborate than simply stating that policing is about social control, rather he problematizes such control itself by examining to what extent it is necessary or oppressive or both and the limited extent to which policing is actually able to deliver such control. But what we only focus on here is that a useful way of conceptualizing much of what the police to is as attempts to create and exercise social control.

High Visibility seem to rely on visibility as a mechanism of control. Foucault's concept of disciplinary power (Foucault, 1977) is often cited in this context.

However, it is argued that the idea of surveillance provided by disciplinary power is too hierarchical and static to understand the complexity of modern day occurrences of social control through visibility (Haggerty and Ericson, 2000). There have been several efforts to close this theoretical gap. Mann, for example, advances the idea of Sousveillance (Mann, 1998, Mann et al., 2003) to describe an inverse form of surveillance where observation does not radiate from the centre (represented by organisations and government) out to the periphery (individuals) but inversely where individuals observe authorities, Ganascia (2010) also explores some of Mann's concepts by discussing to what extent it can be generalized. Mathiesen (1997) develops a similar idea by exploring the viewer society to develop the concept of the synopticon to describe how with modern media the many see and admire the few and self-control in the process. Further, Blackman (2008) advances the idea of Omniveillance to describe the ability to provide constant live video feeds of spaces by companies such as Google. Here observation is not only potentially taking place at any time but actually takes place continuously. Often these new subcategories of surveillance are based on technological advances.

However, these changes of visibility as a means of control are not solely a function of singular advances in technology. Factors have come jointly into play and are currently interacting. Technological advances, most importantly the large-scale dissemination of smart phones with integrated video functions, are accompanied by new representations about capturing and sharing events as encapsulated by concepts such as Citizen Journalism (Greer and McLaughlin, 2012, Greer and McLaughlin, 2010, Wigley and Fontenot, 2010) and facilitated by media such as YouTube, Twitter and Facebook. Moreover such multi-layered developments on the physical, representational and institutional level are typical for social change (Lahlou, 2008a). This, through new technology, representations and institutions' enabled, amplified and modified visibility, is what we refer to as New Visibility (Thompson, 2005, Goldsmith, 2010).

Research aiming to understand the workings and implications of these developments is growing (Wigley and Fontenot, 2010, Lahlou, 2008b, Dennis, 2008, Brighenti, 2012, Thompson, 2005). In addition this new form of visibility has also been investigated within the context of the police (Robinson, 2012, Carrabine, 2012, Greer and McLaughlin, 2012, Greer and McLaughlin, 2011, Greer and McLaughlin, 2010, Goldsmith, 2010). Generally, it is argued that New Visibility is positive as it makes police more transparent and holds them accountable. However, it is also noted that New Visibility amplifies the problem already experienced with classic media of taking developments out of context (Robinson, 2012). This new visibility is also more likely to lead to public naming and shaming of individual officers (Robinson, 2012). Overall, most of the literature on the effects of new visibility on policing is based on particular high-profile events, such as the Rodney King (Goodwin, 1994) or Ian Tomlison (Goldsmith, 2010, Greer and McLaughlin, 2012) case, and focuses on the framing of such issues (Wigley and Fontenot, 2010) and policy and legal implications (Robinson, 2012). This research is useful because police practices are situated in and influenced by the institutional and policy context. However, they tend to place less focus on everyday police practices. This paper suggests that the impact of new Visibility on everyday practices also needs attention as these are the most prevalent and routinely affect many people.

Visibility is part of everyday police practice. Seeing and being seen shapes routine activities (Bavelas et al., 2008, Farough, 2006, Mol et al., 2011, Walther et al., 2001). Goodwin has argued that vision is an essential part of professional practice (Goodwin, 1995), particularly for police officers (Goodwin, 1994). This is because seeing as a social practice is not solely about the physical process of light deflected from an object entering the eye i.e. sensory input. Crucially, it involves noticing these inputs and being able to interpret them by relating them to a body of knowledge and affordances (von Uexküll, 1956, Gibson, 1966). Within a policing context, Sacks, illustrates that officers form suspicion by perceiving an environment and relating it to their understating of how that environment normally is in order to detect what is out of place or suspicious (Sacks, 1972). Therefore, what people see is in many ways a function of their social position, such as gender (Grabe and Kamhawi, 2006) and profession. In other words, the relationship between seeing and visibility is also

interested in everyday practices, visibility and seeing, therefore, need to be explored in unison. What individuals see and make visible and how they react to what is visible to them can illuminate much of the core of their professional practices. Given that many micro-level practices of policing¹⁹ are structured around visibility, the question arises: how might New Visibility interact with everyday frontline policing practices? In other words, what occurs when officers are aware that an unknown audience can potentially see what they see at an unknown time and place?

Theoretical and Methodological Framework

In 2007 the Home Office provided funding to UK police forces for the implementation of Body-Worn Video (BWV) to foster the collection of 'best evidence' (Home-Office, 2007a, Home-Office, 2007b). BWV is a digital camera attached to the head at eye level, capturing officers' attention as reflected in head movement. BWV are Subcam-like devices (Lahlou, 1999, Le Bellu et al., 2010, Lahlou, 2009, Lahlou, 2006). These devices can be understood as part of the larger development driving New Visibility described above. Originally introduced only for the purpose of capturing evidence, BWV also gives officers the opportunity to engage in the game of Su/sousvaillance (Mann et al., 2003), providing them with the means to capture events from their perspective. The reason we single out BWV amongst the 'video recording gadgets' that drive New Visibility is that it also provides the unique opportunity to employ a methodology particularly suited for this research. As already explored we are interested in seeing as a practice and the effects of visibility on police practice as opposed to seeing in a purely physiological sense. Therefore, we need the means to capture situated practices (Lave 1988) and the cognitive processes (Hutchins 1995) that accompany them. In the following we will illustrate how BWV can be used for exactly this purpose.

This research employees Subjective Evidence-Based Ethnography (SEBE) (Lahlou, 2011a) to capture officers' real-world situated-cognitive processes (Latour, 2005, Hutchins, 1995a, Lave, 1988, Suchman, 1987). SEBE is developed on the premise

¹⁹ Examples of such micro-level practice are, deliberate gazing at somebody that commits a minor offence to induce self-regulation or alternatively 'turning a blind eye' to it in order to be able to ignore the offence without publicly undermining the legislation that prohibits it.

that activity is a process distributed between our brain and the physical and social environment. Point-of-view recordings are used for self-confrontation interviews to elicit the reasoning processes of participants during the recorded activity (Cranach, 1982, Cranach et al., 1985, Cranach and Kalbermatten, 1982, Theureau, 2003, 1992, Vermersch, 1994, Omodei and McLenna, 1994, Omodei et al., 2005, Omodei et al., 2002, Lahlou, 2011a). BWV provides data that captures the practices of officers in context, making it possible to use SEBE to study micro-level components of policing. Prompted with cues from BWV footage, officers can provide detailed and groundedin-evidence accounts of their mental processes (Lahlou, 2011a).

Data elicited using SEBE is introspective. Based on a review of several studies of their time, Nisbett and Wilson concluded that 'there may be little or no direct introspective access to higher order cognitive processes' (Nisbett and Wilson, 1977 p. 231). Nonetheless, introspection is implicit in many forms of data collection in the social sciences, to be limited to the use of implicit measurements and controlled experimental settings that focus efforts on circumventing the issues of introspection would greatly impede the ability to explore new social phenomena. Also, whilst experiments may provide important heuristic models for understanding cognitive processes, their potential to inform policy and practice are considerably increased when field studies of real-life situations, involving the detailed capture of naturallyoccurring activity, complement them. Therefore Smith and Millers (1978) advise a focus on the conditions that allow research to obtain valid introspective data rather than to either reject it completely or embrace it uncritically. This is precisely what SEBE is designed to do. SEBE elicits and triangulates two nested forms of data, recordings of debriefing interviews (self-reported) and observation of activity (pointof-view recordings of practice). Each form of data on its own has shortcomings. Selfreported data has weaknesses with regards to validity and may be biased by social desirability. While with purely observational data on the other hand it is difficult to ascribe intention to the subject. With self-confrontation, subjects describe their own intentions. These descriptions are specific to the situated time span of activity captured on BWV recording, which enhances their validity because it is not build on the presumption that human cognition is uniform and universal (Levinson, 2012). Further, the link between action and cognition is strengthened. SEBE does not elicit broad descriptions about mental states and behaviour. Rather, with this method

descriptions of cognition and observed activity can be interlinked to the level of one 24^{th} of a second²⁰.

However, the use of video-as-data that allows these methodological advances also carries its own challenges. The use of this form of data is quickly gaining prominence (Knoblauch and Schnettler, 2012, Heath et al., 2010). One of the core methodological questions any kind of research that uses video needs to address is how video affects the very phenomenon it captures. In other words, video based research needs to be reflective about the extent to which its results are biased by reactivity (Mastrofski and Parks, 1990):

Assessing the influence of video on the data collected is a key issue that raises questions crucial for the quality of the research undertaken. Heath and colleagues (2010)) and others suggest that social researchers 'address this problem empirically' by examining the influence of video recording on their research subjects (e.g. participant orientations to the camera) and analyse it to understand how and when it arises and its impact on the use of parts of the data. (Jewitt, 2011 p. 174)

The research question posed in this paper (How does New Visibility effect everyday frontline policing practices?) directly follows this advice. The posed question is therefore not only of real-world but also methodological relevance. This research combines accesses to naturally occurring audio-visual material that is the result of developments (arguably at least partly a self-perpetuating reaction to New Visibility as we will see later) within the police with an innovative research method for its analysis.

6.2.2. Methods and Materials

This research is part of a PhD that focuses on police practices more generally, not only the impact of New Visibility on policing. The material here presented is a selection of incidents from this research that illustrates effects of New Visibility. However, the research was not designed to systematically uncover all the processes in which New Visibility may affect policing. The findings should therefore be understood as a number of case studies selected to illustrate under-theorised effects of

²⁰ Assuming the usual 24 frames per second today's cameras usually record as a minimum.

this visibility. No claims about the frequencies and distributions of these effects are made. Policed incidents are diverse (Bittner and Bish, 1975) and vary broadly across communities (Banton, 1964). Research on this scale can therefore not provide a systematic overview of all effects of New Visibility on policing. Nonetheless, the reliance on naturally occurring BWV recordings places this research well to capture key aspect of the phenomena. The aim is to widen the current discussion that focuses on media reported high-profile incidents to include subtler everyday policing practices grounded in empirical observation.

London Police started to use BWV in September 2008. Response and Safer Neighbourhood Teams use 40 EVEREC ME1 POL cameras. Recordings are saved on a stand-alone server and managed with CARMA software from Reveal Media. According to this software, close to 240 officers have uploaded about 3900 pieces of video footage, averaging about 9 minutes of length. 18²¹ of these officers have been interviewed for this research concerning 28 of their BWV recordings. These recordings provided the 'interview guide' for the self-confrontation interviews. Transana video analysis software (Woods and Dempster, 2011, Afitska, 2009) was employed to transcribe and analyse the interviews. Transana allows the synchronisation of a video recording with its transcript. It then facilitates a number of coding procedures that are automatically applied to all linked recordings and transcripts.

However, particularly with the use of video data, there is a call for data triangulation to foster analytic density (Blaikie, 1991) because of the limited history and context of video (Jewitt, 2011). This research therefore employs a number of secondary forms of data collection to contextualise the results of the video research. Namely, an expert group comprised of practitioners using BWV footage in all stages of the criminal justice process and from different police services was consulted regularly to get an understanding of the organisational, regulatory and procedural context of BWV. In this effort, official guidance and evaluations on BWV were also consulted (Home-Office, 2007b, ODS-Consulting, 2011, Laur et al., 2010). Finally, the researcher rode along with officers on duty on multiple occasions to get an unmediated sense of police

²¹ 3 interviews with female officer, 2 interviews with Police Community Support Officers (PCSO) and the remaining interviews with constables and Sergeants.

work. He also trained as a Special Constable for the entire month of October 2012 and volunteered as such to obtain ethnographic data on policing that helps to contextualise the video data (Jewitt, 2011).

6.2.3. Findings and Discussion

We will use a number of empirical incidents captured on BVW to demonstrate that, firstly, seeing and visibility are core to policing practice; indeed, we will argue that officer's managing what they are seen by the public to see is in itself a form of policing. We will then further illustrate that New Visibility impacts these practices. It will be argued that New Visibility affects policing practice in broadly two ways; firstly, by impacting procedures and processes of policing, and secondly by modifying patterns of interaction with members of the public. We will suggest that one important mechanism impacting procedures is that recording makes salient an abstract potential audience and their norms of judgement within the immediate MOP-officer interaction. With regards to patterns of interaction we will focus on the 'gaze amplifying' qualities of recording and the potential to make camera and footage itself the object of interaction. We conclude this section by exploring some of the coping mechanisms that particularly officers but also MOP employ in response to these developments. In this context we will argue that besides making policing more transparent, officers may also react to cameras with a more rigid formality and a less adoptive style of policing to cameras. However, officers and MOP may also develop subtle forms of resisting and manipulating recordings and their presentation.

Seeing and Visibility as existing parts of police practice

As explored in the in the theoretical background section, seeing and visibility have always been core elements of policing practice. Professional vision (Goodwin, 1994) is essential for officers to form suspicion (Sacks, 1972) and recognise how they can act upon an incident (see paper discretion). Managing the way they are seen is an essential part of signalling to keep the peace and exercising control for officers (Manning, 1977). In this section we will provide further evidence for this position. SEBE allows the exploration in more detail of the workings of seeing and visibility in police work. In this section we will first focus on incidents that illustrate the relevance of seeing for policing in order to then focus on the use of visibility for officers.

Being an officer carries with it demands and obstacles that have implications for what is relevant in situations. Some key examples are concerns for officer safety, awareness of illegal activity and suspicious behaviour that potentially leads to illegal activity. The argument is that over time an increased focus on such practice-implied obstacles and demands along with communicating and sharing insights about them with peers creates an aptitude to perceive in a refined way (Wenger, 2000, Lave and Wenger, 1991, Latour, 2005, Hutchins, 1995a). The way officers constantly scrutinize environment for 'signs of trouble' is also long-standing in observational police research to the point that 'suspiciousness' is seen as central to police culture, (Rubinstein, 1974, Holdaway, 1983, Manning, 1977, Punch 1983). In the following we provide cases that suggest that, indeed, officers develop Professional Vision (Goodwin, 1994). Objects are regularly seen in terms of their potential misuses (Sacks, 1972). When officers scan their environment during regular patrolling activity they see items such as shops, bikes and quiet corners in terms of the illegal activities they can be part of or whether they simply appear out of place. The following quote is the running commentary a male sergeant provided on a short piece of BWV footage that shows a few hundred meters of him patrolling what has been his beat for more than six years:

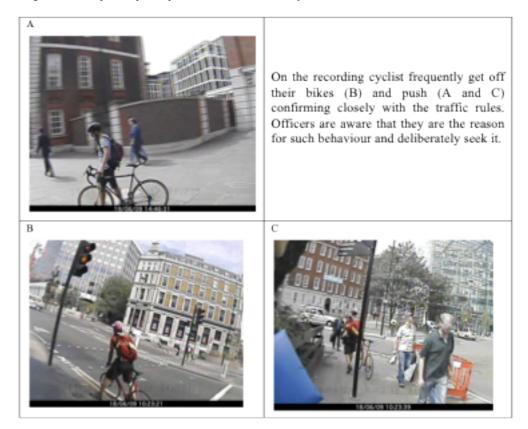
I look at this bike's lock just to see how well it is locked up (image A, Figure IV.). Because sometimes it is locked but you could just lift it over the sign... Again there I am looking at that car thinking what is that car doing there (image B)? Ok, it's like a taxi so I am happy with that, dealt with and moved on really ... Again there is a Marks and Spencer's at the corner here that had problems with theft before as has the shop on the right (image C). So again round and about letting people know that we are around... We had some damage done to this statue here, so also a quick check at that as well (image D). (Neil SEBE 07:12)

Image 9: Knowing the Environment



In the same manner physical environments are regularly perceived in terms of their potential threats. Particularly in private dwellings, officers are attuned to notice any sharp objects that could be used against them (for that very reason kitchens are often deliberately avoided), civilians are assessed in terms of their ability to harm officers. How far away is he standing? Do I have to turn my back towards her? Does he put his hand in his pockets to maybe pull a weapon? All of these questions are examples of considerations officers continuously make. Other environments again are seen as easier to police securely. The availability of different rooms to separate people, proximity to a wall that can be used to shield an officer's back, closeness to a major police station that ensures the availability of ample and fast backup if needed, are only some examples:

We have got the luxury of being in the town centre where of course the main police station is... so we know that when we got in any difficulty we go on the radio and our colleagues will be there extremely quickly. (Dan EBE 9:05) Image 10: The impact of police presence on rule conformity



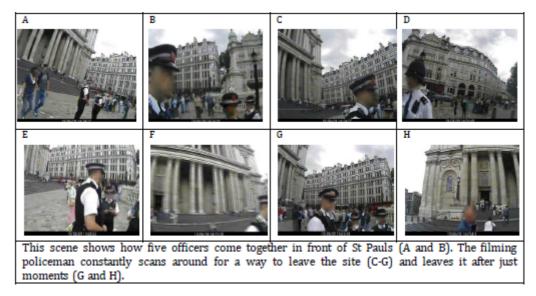
These observations resonate with Sacks' (1972) concept of territory as an 'expressive unit'. Territory, it is argued, communicates in its overall composition whether there is no need for concern or whether something is out of place and requires further inquiry. In another paper we explored how officers use an acquired understanding of normality of the territory they police to make judgements about what qualifies as suspicious (see first paper on situated discretion).

However, practicing policing does not only shape officers perception, it also creates awareness of how, reversely, officers are perceived by members of the public. Officers are conscious that members of the public are more likely to conform to the law in their presence. Several times cyclists push their bikes through the visual field of the officer on the recording (see figure: The impact of police presence on rule conformity). Officers point out that this is a reaction to their presence: 'I can guarantee if we would not have been there he would have been cycling.' (Neil SEBE 22:19) For officers, their gaze is a consciously used tool in the toolbox of policing practices. In another situation, an officer recorded a taxi blocking the traffic and comments. 'That guy just stopped, the taxi you know, blocking the road up. So I gave

him a little stare when he went passed me' (Neil SEBE: 32:35). Therefore, officers at times deliberately aim to be seen to see. They are aware that this communicates to MOP that the offence they are committing is noted and thus more likely to be followed-up on. The expectation is that the MOP will then in turn self-regulate in order to avoid the officer getting involved. Some officers use this impact of their visibility in a remarkably careful and reflected manner. On another occasion, five officers congregated and talked for a while (See image 11: Awareness of Effect of Own Presence on Public). The participating officer described that this made him uncomfortable because a larger group of police is likely to call the attention of the public and can be perceived as oppressive:

I don't like five police officers together... it looks silly... I am very conscious about that now... So I get a bit itchy to get away... Because obviously the City of London Police area is covert by CCTV and when you are standing together five is when my inspector is going to see me and ask why do you need five...within a minute we want to go our separate ways because ... five together it looks a bit... oppressive...people will come around the corner and will think ohh five what is going on. (Neil SEBE 11:19)

Image 11: Awareness of Effect of Own Presence on Public



In sum, to see and to be seen is a central element of police practice that fulfils multiple purposes. Participating officers demonstrate a skilfulness and high awareness about the dynamics that this mutual watching between police and public creates. These observations allow more theoretical reflections. Officers actively managed their mere visibility, more what they are seen to see, in the public. This has real physical consequences in the behaviour of the public. Members of the public conform more to

rules in the presence of officers. Officers are crucially aware of the representation the public has of them and actively manage it. As a consequence, they alter their behaviour, and therefore what they *are* as the police. In other words, the public and the police co-construct police by alternating between the symbolic representation and the physical manifestation of the police. In the same manner that the public modifies its behaviour in the presence of the police, officers also internalize the reactions to their own representation into their daily practice. In is on these bases that we propose that officers' managing what they are seen by the public to see is in itself part of a subtle form of policing.

The impact of New Visibility on police procedures

So far we have focused on police practices that are not necessarily brought about by New Visibility. Such modified practices will be the focus of the following sections. That is to say we will explore the impact of officers' awareness of and confrontation with the widespread availability of recording devices (such as smartphones and BWV) and infrastructure (e.g. YouTube) to disseminate them. These developments result in a large increase of the potential audience that can see a policed incident. However, it is important to highlight that this additional audience is not in situ but bases their evaluation of the policed and recorded incidents precisely on often isolated video mediated information. In this section we focus on officers' activity impacted by changes in procedures resulting from New Visibility and particularly BWV. In the next section we expand the focus to include the effects of New Visibility on police interactions with MOP.

One of the main drivers for the use of video in policing is its perceived objectivity. Video is seen to provide indisputable evidence. Indeed 'quality evidence' was the main initial argument for the introduction of BWV (Home-Office, 2007b). Collecting valid and legally admissible evidence of crime is certainly a core aspect of policing, but what is the impact of New Visibility on these efforts?

Video as evidence has certain unique characteristics - it is multimodal (Bezemer and Jewitt, 2010), captures context and is often perceived to be self-explanatory. In addition, there is a tendency to accept video as a true account of events that trumps

other forms of evidence (Robinson, 2012). Here lies one of the first concerns regularly voiced by officers, the notion that the increased availability of video evidence will create expectations for such evidence to always be present²², resulting in an attitude of 'if it was not filmed it has not happened', that devaluates other forms of evidence. The sentiment is that in the near future the Crown Prosecution Services may no longer prosecute cases they used to prosecute based on verbal evidence given by officers because they have 'raised their standards' to expect the more compelling video evidence. At the same time, officers appreciate and are content about the fact that video can provide a rich and captivating account of an incident, demonstrating the 'true nature' of the culprit much better than a verbal account would ever be able to. To illustrate, a drunk professional that behaved in an abusive and anti-social manner when arrested by the police will likely present him/herself as sober, eloquent and in a suit on court day. Being able to show video footage of the arrest in such an incident effectively challenges the persona the accused tries to portray in court.

A core factor that allows video evidence to be convincing in this way is that it provides the opportunity to 'see with your own eyes and hear with your own ears'. Video provides a detailed audio-visual account of a situation, supposedly allowing the viewers to form their own interpretation of it. This position is to some degree supported by the fact that video accounts are not selective in the manner of verbal accounts. Verbal reports are by nature selective, as to completely describe a given situation verbally is not possible - deliberately or not, certain aspects will be highlighted at the expense of others. On the other hand, video suggests that situations are 'just captured how they are', since it is a technical and mechanical process. Indeed, video evidence often captures the inconsistent, random and reactive elements of situations that are rationalised in verbal accounts. However, focusing on the manner in which video is not as selective as verbal accounts may lead us to ignore the ways in which video is selective in its own right. We will describe some of these forms of selectivity when we illustrate how they may be deliberately used to cope with New Visibility two sections below.

²² This bears similarity with concerns that officers had when statements given to the police by MOP started to be audio taped. Only requirements for statements given at a police station to be recorded made it into PACE. However, that has now days resulted in the practice officers routinely bringing suspects to a station to ensure that their statements are taped.

However, we should already note at this stage that especially in the case of BWV, where a camera is attached to a human being, recorded video evidence has a constructed dimension. The constructive nature of BWV recordings has parallels to verbal accounts; video accounts can also highlight and elicit aspects of activity and rationalise its progression. Officers may deliberately focus their attention, and consequently also the BWV recording, on what they deem as relevant evidence. In interactions they prompt members of the public to highlight pieces of information they want to record. One officer in the self-confrontation interview called it *'one for the camera'* when he provided his summary of the situation to a MOP and prompted him to confirm this account:

What I am doing is that I am explaining for the camera and for the people who are going to watch this asking 'this was a domestic incident what happened?' I am explaining for the purpose of the camera anything that he has said to me. That he does not want to do any allegation, that he does not want to say anything, and getting him perfectly on camera nodding and saying yes that is correct ... so there you go ... if somebody is trying to say 'officer why did you not do this or that' whether it is people form here in the job asking me questions or people at court or worst case scenario if somebody from the papers was going to ask me questions – I can say (points to the screen) ... you can almost say it is 'one for the camera' just so that everybody fully understands what has happened here. (Ian SEBE: 1:33:38)

On other footage entire searches of property are re-enacted (after counterfeit money was already found without the BWV turned on) in order to document a transparent, logical and self-explanatory account of how illegal material was found on video. What such recordings illustrate is that with New Visibility officers do not only display their activity for those present in the situation. They tailor their practice also for the audience that can become a spectator of the incident through their recordings.

To cater to the anticipated audience of recordings implies that at least partly the norms of the viewing environment (e.g. court room) are invoked in the filming environment (policed incident). However, pleasing an audience that will be particularly focused on the legality of actions, as in this scenario, may result in an overly rule conforming and somewhat robotic policing style. To illustrate, on footage that documents the arrest of a woman for a common assault also in a domestic incident the woman earlier admitted to the recording officer that she had committed the assault. When it comes to the arrest (see: Figure. Arrest during domestic incident; image A) and the woman pleads not to be arrested the colleague of the recoding officer tells her: 'you said it on camera, we have no position but to take you with us' (Jack BWV 15:04). In the debriefing interview the recording officer reflects in regards to having the admittance of an offence recorded on BWV in the following. 'It is a two-sided coin in another way if I would have said we look another way than we would also have incriminated ourselves as well. It is there for everyone to see' (Jack SEBE 1:08:14). In other words, having it there for 'everyone to see', with 'everyone' referring to an abstract out situ audience that could review this BVW footage reduces the potential ways in which the officer can deal with the situation, crucially also including those avenues that the in situ suspect would clearly prefer.

Implementing guidance and legislation to the letter in order not to be criticised means that officers are unlikely to use the discretion they have and rather become overly (legal) risk adverse – not an adaptive form of policing. These efforts to accommodate the potential normative judgement of the viewing context in the recording context therefore represent changes in officers' activity brought about by New Visibility. Officers focusing more on displaying the coherence, rationality and rule conformity that is evaluated in a courtroom because their activity is filmed are therefore a mixed blessing.

Certainly, rationality and rule conformity seem to describe the positive effects of transparency and accountability. We want officers to 'own their actions', to be able to account for them and stick to the law. However, to be able to account retrospectively for any situation that has been 'lived forward' without high insight and in an ambiguous context seems not to appreciate the reality of any human practice, not just policing. Such demands are likely to make behaviour more risk averse and inflexible. Further, as already alluded to earlier, in everyday policing activity, officers have to negotiate multiple demands, such as safety precautions, where possible maintaining a cooperative relationship with the MOP they encounter in an incident, following procedurally just and legal procedures. Doing all of this correctly becomes an impossible task when choosing the ideal response to one demand requires

Image 12: Arrest During Domestic Incident (This image has been removed as the copyright is owned by another organisation)

compromising on another. Therefore, rather than organizing policing activity along a single dimension, it is more realistic to focus on the quality of the compromise between different demands (also see second paper in this PhD). For officers to have discretion when faced with the particular circumstances of concrete situations is therefore of essential importance. In the governance of the police this has always at least tacitly been acknowledged (Lustgarten, 1986). Courts may focus on upholding legal principals, the police, however, follow the larger agenda of 'keeping the peace' that upholding the law is only one element of.

The accountability introduced with New Visibility, however, is likely to emphasise requirements officers face that are abstract in general and explicit at the expense of those that are context dependent, immediate and implicit. Because they can be claimed in a courtroom and are more easily recognised as being violated in video evidence. To illustrate, it may become disproportionately more relevant that an arrested individual is cautioned (a legal requirement) than that the officer is appropriate considering the circumstances of the cautioning (does the MOP actually understand the caution; what is the emotional impact on the MOP to hear this formal piece of language; is there somebody present in front of which the MOP is embarrassed to be cautioned - their child etc.). This means that purely through technical change, not as a result of the political process, the mandate of the court may be given preference at the expense of the mandate of the police. We can speculate that this may induce a more rigid 'policing by the (legal) book'. We are not suggesting to have any answers but from our analysis would argue that when considering the complex questions of the police mandate and how to assess and regulate it we should focus more on the concrete situations and less on abstract principles then is often the case.

Indeed in our example of the domestic arrest the recording officer continues with the 'legal jargon' (SEBE 49:25) to ensure a legal arrest. However, the woman starts resisting and at some point up to 5 officers restrain her while one officer holds the door to keep the teenage son of the woman out (see: Figure. Arrest during domestic incident; image B and C):

Of course you can hear her son in the background from saying absolutely nothing he is now shouting and going off. And I am very

consciously aware that he is still in the kitchen and could gap anything and we all got our backs to him. So that is like another bit of it. (Jack SEBE 50:39)

In an effort to ensure better follow-up on incidents of domestic violence, officers have been provided with rigid guidance on how to proceed with such incidents, leaving them with little discretion. Crucially, as soon as officers are confronted with only an allegation of an assault they cannot leave a couple by themselves but have to separate them for at least one night²³. However, BWV also captures the ambiguity of the concrete situation. In the recorded domestic incident the husband called the police. When interviewed about the footage the recording officer suggested that the husband may have exploited the police for personal vendetta. Indeed when the officers finally have restrained the woman and walk her out of the house (image E) she kicks the door of the room the husband is sitting in (image F) but then calms down when they out of the building (image G). The officer is reflected in his interpretation of the situation, demonstrating that he is aware of a many of its subtleties:

There are certain situations where you feel it is part of your job and it has to be done but you think perhaps if dealt with wisely it could be done in a different fashion. It does happen but sometimes you have no choice (Jack SEBE 56:39)

Some people if they are with friends or family they almost have to put on a front or show to save face almost. So I think it was interesting that when she was in front of her son she was like 'I am not going with you, you will not take me away'. I believe she said you will have me out kicking and screaming and she does put up some resistance initially. But then when she is out of the house, almost kicks the door of the room where her husband is, and almost literarily when she is out of the house and on the front road no less 10 foot from her front door she completely changes ... Because then she has not been anything then fairly nice (Jack SEBE 1:02:16).

This suggests that officers can have a more subtle understanding of the situation then formal guidance could account for. The clear rules and having their implementation enforced by documentation with BWV in this case possibly prevented the officer from undertaking more adaptive policing.

²³ Indeed BWV was partly introduced to capture such allegation in order for officers to be able to follow-up on them even if they are later retracted.

Visibility may have a similarly ambiguous effect in moments when officers account for their action to members of the public. We can illustrate this using BWV footage from the police and on the Internet made available video data from protesters of the same event, an 'Anti-scientology' protest by the 'Anonymous' group (Anti-Scientologie, 2008). During this event one of the participants held up a sign calling Scientology a cult that was challenged by the police on behalf of Scientology and ultimately resulted in the participant being summoned to court with the sign being confiscated when he refused to take it down. During this incident officers are recorded by many protesters and asked to account for their actions (see figure: Anti Scientology protest from officer and protester perspective). One officer, possibly because their actions have been made so very visible, gives a statement explaining the action of the police. He does, however, only provide a guarded statement, probably also because of the level of visibility:

MOP filming officer: I am a bit confused really as to how the word cult can bring you into that situation [being summoned to court]

Police Officer: ... Crown Prosecution Services has said that any sign that says scientology is a cult could be deemed offensive ... So if that happened we have to warn people obviously that the word cult could be offensive ... what we have been recommended to do if people don't remove the sign once we advised that it could be offensive, then we have to take action against that and that is what is happening now ... We have been told that that is not acceptable ... we have been advised by our solicitors from Crown Prosecution Services ... I am not going to enter discussions of whether we think it is a cult or whether we think it is an insult, it is not for us to discuss. But obviously complaints have been made. It has been treated as a religious organisation for the purposes of this demonstration and we are enforcing the law to the best of our ability and the rest is for the courts to decide. (4:12 Footage by Anonymous)

Another officer starts off in a more colloquial and friendly manner to talk about the arrest buts also snaps into a more guarded mode of communication

MOP: The word cult, why are they not allowed to use the word cult in their banners? Officers: Your guess is as good as mine [laughs] MOP: Really? ... you can't just make it up as you go along. I mean somebody must have said no you cannot use that. Officer: The thing is that certain people have suggested that it may be offensive. (3:07 Footage by Anonymous) In the first exchange the officer actively avoids emphasising or exploring with the MOP the arguably legitimate confusion about the implication of the use of the word cult. In the second exchange the officer starts off a bit softer, implying that he is also surprised about the status given to the use of the word cult and signalling openness to explore it, however, not for long. Again that he is being recorded seems to play a role in this change of interaction style. Therefore, while New Visibility may create more accountability and overt procedural justice it may also have adverse effects. Namely it may induce less authenticity as officers are more guarded and rigid in their behaviour, which therefore reduces informal efforts to problem solve and hinders attempts to win MOP support for the police in their work.

The impact of new visibility on interaction with MOP

In addition to changing how officers approach and behave during an incident where BWV promoted New Visibility, BVW also has the potential to impact on the interaction officers directly have with MOP. Cameras such as BWV can become in themselves the object of interaction. On the analysed footage, talking about the camera and its purpose is repeatedly used as a form of 'ice breaker' by both members of the public and officers. Officers may chat with kids that notice the device to build a relationship. MOP, especially with the increase of 'cop shows', may display an almost naïve believe that they 'will be on TV' when confronted with BVW (see figure. Officer talks with kids about camera):

Kid: What is that?
Officer: A camera
Kid: Oh cool now we are going to be on TV ... Have you got the head vision thing on it?
Officer: Yes everything is on it (laughs) (Martin BWV: 20:50:08)
Image 13: Officer talks with kids about BWV device

However, the same device can also be enacted in a more robust manner. Officers comment that pointing out to a MOP that they are being video recorded tends to induce better behaviour. BWV seems to amplify the impact of the 'seeing to be seen' that officers use to manage to induce self-control among MOP, discussed above as one tool of policing. To, illustrate on recorded patrolling activity officers come across

a group of skateboarders where skateboarding is not permitted the officers deliberately signals that he is recording to induce them to go away (see figure: Officer signals that he sees and records):

Image 14: Officers signals that he sees and records (This image has been removed as the copyright is owned by another organisation)

So we just tell them 'You are not allowed to skateboard here please go away'...so I am just recording it to make sure that they go. But I think it was useful. These blokes twigged we had a head-cam, I just made a point of looking at the screen and fiddling with it, just to make a point (Neil SEBE 18:25)

However, there are qualifications to this observation. Officers speculate that if MOP choose to become violent despite the fact that they are being recorded, they are likely to focus their aggression on the recording officer. If BWV is in part a slightly stronger version of 'the gaze' an officer may employ to keep people 'in place', it is also not surprising that when choosing to resist such means of control, the level of resistance is also slightly amplified. In addition, certain communities may react particularly badly to being filmed. One officer who works with the Traveller community mentioned that this group dislikes him using a camera and that if he did it would quickly deteriorate interaction. Another officer, mainly tasked with gathering intelligence on the street, suggested that some of his informants would not talk with him when he carried a BWV device.

The effect on interaction can even be stronger when the focus is not on the camera but on the footage it produces. To review on the spot with MOP what officers have filmed, bases discussion about what has and has not happened on records of documented activity. Officers see this as one of the main potentials of BWV. Being able to immediately display the available evidence (or even just point to the fact that it is available, as illustrated in the example of the domestic arrest) often stops MOP from trying to 'talk their way out' of a situation and induces them to admit what they have done. This in turn often makes it easier to find immediate resolutions on the spot and deal with issues with minimal bureaucratic effort. Much energy throughout the criminal justice process is devoted to arguing about what actually occurred. If this can immediately be established and MOP may even admit their guilt, much low level 'volume crime' (many traffic and public order offences) can quickly be dealt with Penalty Notices and the like. It also allows officers to disown their actions to some extent by arguing that now that the evidence is on (video) record they have to followup on it.

However, it is also important to note that video recordings are usually initiated reactively. Often the camera is turned on only when an event that is deemed to be of evidential value has already started. That policing as a whole is mostly a reactive exercise further amplifies this process. Rarely do officers catch illegal activity in the act; they are usually called during or after the event. Therefore, even if officers film continuously from the moment they arrive they may not capture the most relevant evidential moment. However, at the same time, policed incidents often unfold as a process not as a single moment in time event. Officers are confronted with messy social situations and work to make them actionable within the law. In this process they solicit, highlight and co-construct information (see first paper in this PhD). Therefore to record this process can still captures relevant evidence such as first accounts that MOP provide but later backtrack on²⁴, the attitude of individuals on the scene and their initial reaction to the police.

Strategic coping mechanism with new visibility

Video provides new affordances for both the police and MOP. Each 'side' can to some extent use these affordances against the other. In this section we focus on the coping strategies that have been developed to deal with such 'hostile visibility'.

It has already been argued that video is less neutral and objective than we tend to initially think. The angle something is filmed from, the time of the beginning and end of the recording are inevitable elements of filming and carry a deeply subjective component. They frame a situation, making the viewer see things in a certain way, intentionally or not. Therefore, New Visibility can also be seen as a struggle over perspectives between officer and MOP. This can be developed by comparing police

²⁴ That is not to say that not being able to backtrack is always a good thing. For example, if it is clearly evidenced that an individual denied an action, that individual could not admit to the action anymore without also admitting that s/he lied earlier. Therefore, if it is not about 'shaming' anybody but about developing a shared account of what occurred being too good at documenting the process of constructing that shared account may actually make it less likely that one is agreed on.

and Anonymous video data of the Scientology protest already used above to illustrate several observations:

Firstly, what becomes apparent on recordings from either side is that protesters wear masks. Moreover, there is a large presence of video devices and both sides are careful to record any interaction they have. However, each video recording shows a different progression of events. In the case of the police footage the recording starts earlier and includes warnings the sign bearer was given not included in the recording from Anonymous (image A). Further, the Anonymous footage is edited; additional information is provided in the form of subtitles (such as '*It hasn't taken long for the City of London Police to begin a crack down*...' (Image F) to guide the interpretation

Image 15: Anti Scientology protest from officer and protester perspective (This image has been removed as the copyright is owned by another organisation)

of the recording. Also, the audio has edited music added and video and audio lines overlaid. The police data is difficult to access and the researcher had to go through a screening process and sign agreements, while the Anonymous footage only requires a simple web search to be accessed by anybody with Internet access. These observations illustrate some of the subjective nature of supposedly objective video evidence and how it can be evoked to portray events in a certain way.

We have already illustrated that officers are carefully aware of the effects of seeing and being seen and that both officers and MOP modify their behaviour to it. We can therefore expect that with growing experience with New Visibility, individuals will also become increasingly adept to this from of visibility and shape video evidence in subtle but crafted ways. To illustrate, in one recorded incident an officer BWV records while sitting with an arrested individual in the back of a police van. The officer is very polite while the MOP becomes increasingly abusive in his language (see image 15: Officer aggravates by being polite)

Officer: *That is it, you are almost there.* MOP: *Yeah suit you, you cunt. I will smash you mouth right in.* Officer: *That is not very nice. There is no need for language like that.* (Albert BWV 2:30)

Image 16: Officer aggravates by being polite (This image has been removed as the copyright is owned by another organisation)

In an informal conversation with the recording officer about this footage the officer suggested that he noted that extreme politeness actually aggravated the arrested individual (supposedly because he felt it was patronising). This suggests that being continuously polite was therefore only a way to trigger abusive language in order to record it as evidence that supports the arrest. This does not become evident from simply reviewing the BWV footage but the officer had to point it out. Even if one would have suspected it based on the recording, the officer could plausibly have claimed ignorance (as he did during the actually recorded 'formal' debriefing interview).

This observation raises methodological and substantial questions. Firstly, with regards to methods it highlights that SEBE is best used with incidents that carry little reputational risk for participants; alternatively, participants need to have considerable trust in the interviewer. If officers feel that it will harm them or show them in a bad light to share their thinking processes during a specific incident they may 'make up a story' and it may not be noted. Secondly, substantially, it suggests that the transparency New Visibility is sometimes hoped to provide has its limitation. People have always found ways to resist and undermine such prescribed transparency. In addition, for the policing context, it appears that complete honesty and transparency about all actions officers engage in may even be sanctioned, precisely because officers need to keep up an appearance of compliance with the law and control (Manning, 1977) that is not the empirical reality (Goldstein, 1960, LaFave and Wayne, 1962) officers are required to be transparent about.

A final aspect of New Visibility is that police response to it repeatedly results in practice changes and even more visibility for officers – BWV is here a case in point. It is not only members of the public filming officers that make the police more visible. Officers themselves are making their practices more visible in an effort to provide video evidence that shows events also from their perspective – (counteracting the Sousveillance of MOP)

A potential issue for the police becomes evident when we connect the observations made about Professional Vision (Goodwin, 1994) that characterises the professional body of police officers, with the notion of the constructed nature of video evidence we emphasised. Video evidence that is constructed from a particular professional perspective for an abstract and anonymous audience may easily miscommunicate. This is because there can be a disconnect between what an officer thinks a recording provides evidence of and what the public thinks the same recording provides evidence of. To illustrate, certain arrest procedures aim to minimise the potential for an individual resisting an arrest to be harmed. These procedures entail the involvement of several officers to arrest a single individual, with officers holding the head of the individual, and the double locking²⁵ of handcuffs (see figure: Arrest during domestic incident, image C). The occurrence of these procedures for officers is likely to be

²⁵ Double locking handcuffs fix them on a certain level of tightness. Otherwise pulling on them could result in further tightening to an uncomfortable or even harmful level. However, double locking also requires more time than leaving them the arrested individual's wrists in their self-locked state.

judged as evidence that the individual resisted the arrest and that officers did their best to minimise the risk of harm. However, for civilians these procedures may well look repressive. This is yet another reason why the New Visibility of the police requires the development of an informed practice of critical seeing and 'seeing how others may see', across the criminal justice sector.

6.2.3. Conclusion: Issues created by New Visibility and potential responses

Seeing and visibility has always been an essential element of policing to some extent. New Visibility only amplifies these functions of policing. However, particularly the creation of digital audio-visual *evidence* needs to be critically alluded to. Assumptions about the objectivity of video may lead to clashes between the need to serve the rationale of courtrooms as opposed to that of the concrete situation. Precisely the fact that video is not self-explanatory and objective opens the door to a number of dilemmas.

6. 3. Linking Statement Third Paper

This paper was both a methodological reflection on the impact of the method on the observed phenomenon, and an investigation of a real-world phenomenon. With this dual purpose it illustrated the effect of new visibility on both police procedures (i.e. formalised institutions) and interactions (i.e. encounters) with members of the public. In this manner it offered insight into the effect that the nature of data collection may have on the findings of the first two papers, which also focused on the role of encounters and institutions in policing. A reflection on the impact of camera mediated visibility and seeing on officer's interaction with the physical environment is in this regard missing. Nevertheless, we learned about the (unintended) effect of new technology on practice in a more holistic sense, more holistic because we focused not only on practice in the abstract, but through our method also on the situational dimension of practice in the concrete situation.

In addition to these dual methodological and substantive reflections, the paper also advanced this PhD's larger argument about the status of discretion in policing practice. One may have expected that the additional leeway officers have in the use of discretion, identified in the first paper, can only be detrimental to good policing as it seems to allow for policing to be more arbitrary. However, in the last two papers we have developed an alternative viewpoint. In the second paper we already illustrated why such extra discretion may allow effective negotiation of the often-ignored situational demands of policed incidents and therefore serve a function. Officers in a democratic society with the rule of law are supposed to uphold the law so they also need to be seen as operating according to it, otherwise they would appear hypocritical and lose public support. Therefore, it would undermine the standing of the police if it were widespread knowledge that the law often only becomes applicable to a situation when officers partly construct that situation. For this reason the police cannot acknowledge the inherent and unavoidable arbitrariness and situational dependence of the exercise of law enforcement that nevertheless characterises their work. It is for this reason that we suggest that the additional level of discretion is the basis for negotiating the contradictory demands inherent in policing while maintaining an appearance of control and rule of law. In the third paper we suggested that new visibility is a means of making an abstract audience salient in a concrete situation and

in this manner challenging the identified discretion to frame a situation. The researcher is aware that this line of argument can be interpreted as opposing due process, however, the intention is to shed light on the complexities of policing. It is not that we are of the opinion that policing should be any less controlled than it is, rather that officers in some way already have more discretion than we generally think and that there might be good reasons for this. We showed that to merely assume that the added transparency that comes with New Visibility will always improve policing is potentially more of an ideological hope that ignores that policing is a complex social practice than the result of an informed analysis.

7. Conclusion

In the first chapter we showed the motivation for exploring the relationship between officers and their environment in order to learn about policing. With the review of the literature in the second chapter we identified that professional policing continuously interplays with the concrete situation and newly introduced technology. Reviewing research that forms part of the situated program then provided a theoretical framework to approach this research agenda in an innovative manner. Linking both a criminological substantial research interest with social psychological theory started a key theme of this work. In the third chapter we explained the methods and material employed to empirically pursue the research aim. Crucially, we described the use of BWV recordings within an SEBE methodology, thereby interlinking the use of video method with technological changes that affect policing and result in the used video data. This formed the beginning of a second key theme of the research. Beyond the core method we also presented a number of corroborating methods that served to contextualise the video material mainly by providing insight into the larger institutional settings officers operate in.

In each of the empirical chapters, 4, 5 and 6 we presented papers that drew on the previously outlined theory, method and material. In the fourth chapter we argued that an expanded understanding of discretion illuminates how officers actively make sense of their environment in either formal or informal categories over time. We suggest that from this perspective, officers also often have discretion to construct an incident as warranting a formal response or not. In the fifth chapter we expand on the formal/ informal distinction to also consider the physical and social demands of the concrete situations officers have to appease with their practice. We suggested that being able to both attend to situational demands and maintain an appearance of control and adherence to due process might only be possible because officers have the additional discretion to co-construct the incident identified in the fourth chapter. In the sixth chapter we explored the relevance of seeing and visibility for policing in order to then examine the effects of camera-mediated visibility on officers' practice with a dual substantive and methodological purpose: firstly, to understand better the consequences of the social phenomenon of new visibility, and secondly to examine

the nature of BWV data used in this research. We concluded that the larger phenomenon that BWV forms part of could be to the detriment of situation focused policing as the emphasis on appearance grows and officers are forced to be more mechanistic and legalistic with their policing response to incidents.

This research started out with two broad research questions inquiring what can be learned about policing using BWV recordings and how the use of BWV may impact policing. In the pursuit of these questions, contributions to social psychology, criminology and social research methodology have been made. In the following we will highlight the contributions to each of these fields by breaking the initial two questions into three interlinked questions, with one dedicated to each of the fields. We will first ask, 'How to *do* social control as a practice?' to summarise the social psychological insights we have gained about following an activity that is oriented at maintaining order. Then we will move on to ask what we have learned about doing social control *professionally* to illustrate the contributions to criminology. Finally, we will highlight how the manner in which we *examined* the professional doing of social control has advanced social science methodology.

This is followed by a consideration of the more practical relevance of this work for policy and practice. Finally, we explore areas for improvement of the present research and make suggestions for future research.

7.1. How to do social control as a practice? - Social Psychological Contributions

We showed that the acts that go into policing in the broad sense of inter- individual processes that maintain social control can be studied from the social psychological perspective of the situated program with the associated methods, particularly SEBE. This framework helped us to understand that adhering to norms and institutions in the form of law and guidance is far more than a purely mental process. Law is made salient in distributed cognitive processes in relation to the social and physical environment. When all these levels are activated into practicing social control, activity with this aim becomes complex and multifaceted. As such, policing does not break down into singular linear processes, but involves multiple considerations and strategies. For our analysis we structured this process with the Installation Theory

framework (Lahlou, 2008a), breaking activity down into physical, social and institutional determinants. However, additionally, we continuously highlighted the relevance of the temporal dimension for activity in our analysis. In these sub sections we summarise the insights we have gathered throughout this research about the relevance of each of these dimensions for policing practice.

The social interaction dimension in policing is probably the most studied, which is not surprising if policing itself refers to mechanisms of social control. We started out by observing that officers are generally in a state of having incomplete information but are required to act anyway. We further observed that those that could provide officers with information are often the same individuals officers aim to act on. In such an interlinked situation, control is rarely established purely through dominance, but requires officers to also persuade people to cooperate. Therefore, information acquisition and validation, dominance, and cooperation are all key intermediate goals in an officer's pursuit of social control in interaction. In our first paper, we argued that with the change of phases stipulated by MTAP, (Gollwitzer, 2011) officers also change the manner in which they approach MOP as: source of information; counterpart in strategic interaction; object they are acting upon, and as absent during evaluation. These should be understood as tendencies and while they do not completely correspond to the identified intermediate goals, they do resonate with them. For each of these goals we identified a number of strategies officers employ to pursue them. One interesting strategy for the acquisition of information was officers using themselves as stimuli in a layman's 'experiment' to trigger cues they could interpret. When it comes to cooperation and domination it was important to notice that cooperation and domination would often be pursued in parallel with repeated shifts between strategies that targeted both. The ultimate strategy to establish domination is the use of force. However, whilst it is a unique characteristic of the police that they are legally authorised to use force, officers employ subtler strategies far more often. In this regard this work had a particular emphasis on exchange through visual perception. Officers are highly attuned to the effects their visibility can have on the behaviour of those that see them and deliberately incorporate such consideration into their practice. They manage their visibility and what they are seen to see. In this manner, the symbolic exchange of anticipated reactions to visual cues has real consequences for the activity of officers and ultimately how they police.

Secondly, the physical dimension has its own logic of relative positioning and absence or presence. In our analysis, we emphasised that many of the attributes of a physical environment are actually in a relationship between the acting individual that draws its path from a perceptual level (does the actor actually notice the attribute of the environment) over the alignment with goals (does the actor actually want to incorporate the attribute in her/ his practice) to the level of cognitive (does the actor know how to use the attribute) and physical ability (is the actor able to use the attribute). However, we did not imply that this is conscious and linear process. On the contrary, officers may well have a goal of operating in a certain way which then makes it more likely for them to note primarily the physical attributes of the environment that can enable or hinder this practice. Cognitive attractors theory (Lahlou, 2000) would suggest that it might even be the co-occurrence of a number of these factors in itself that triggers the activity. In that sense, it may rather be an implicit understanding of the potential of spaces (such as kitchens are dangerous and walls provide cover) that function as heuristic indicators of appropriate actions. With experience, grows the understanding of the potential of the physical environments and thus the ability to anticipate. Knowing 'how things can play out' then in turn opens up the possibility of manipulating the environment in advance to make positive outcomes more likely or at least minimise the impact of negative developments (avoid trouble). Analytically, it is key to remember that such manipulations will operate within the logic of space, so they may be about the change of relative positioning (separate individuals, take them into a different room etc.) or making something present or absent literally (calling back-up to increase the presence of officers) or only on a mental level (such as efforts to distract or focus attention of MOP on particular aspects of the situation).

Thirdly, policing has a procedural dimension in the sense that it is not a moment in time but distributed over time. This gives relevance to the order of the sequence of acts, as there is the potential of knock-on effects and different trajectories of activity. Considering the temporal dimension also highlights that policing takes place as a process of 'interpreting events forward' without hindsight. In this context, we observed how experience enabled officers to deliberately time when they would, for example, reveal certain information to MOP or move to act. Such experience also helped officers to identify those moments in the sequence of events that they would need to pay particular attention to in order to obtain clues for their practice. Additionally, officers often have a quite clear understating if their position will improve with time (back up will arrive, a drunk MOP will sober up) or deteriorate (MOP will become impatient and stop cooperating) and incorporate these insights into their practice. In an effort to make salient and understand this temporal dimension we brought to bear a number of theoretical concepts on this real world practice. Conversation analysis (Sacks et al., 1974) already highlights the relevance of turn taking for the construction of meaning - however, with a focus on the spoken word only. Workplace interaction analysis (Heath et al., 2000) made the step to apply concepts of conversation analysis to multi modal (Bezemer and Jewitt, 2010) communication and professional practice. To the best of our knowledge the present research is the first to apply these concepts to the police. This research also took a boarder stand on the analysis of sequences than most research in the tradition of workplace interaction analysis by highlighting the importance of identifying what sequencing is relevant to the actor. This mostly resulted in larger chunks of activity as building blocks of practice than is usually identified in workplace analysis. Further, in the first paper we employed Gollwitzer's (2011) Mindset Theory of Action Phases that makes stipulations about the temporal order of mental processes and actions. This helped to describe how the focus on and interpretation of information is relevant to practice shifts. Similarly, dual process theory (Kahneman, 2003) resonated with the observation that officers can often make quick intuitive judgements about appropriate policing intervention but only slowly come to find the justification for it. Officers probably only engage in 'slow thinking' because it is required of them by the criminal justice process. In this manner, the present research provided further support for these theories. In addition, their potential to inform policy and practice was strengthened because the SEBE approach allowed the study of cognitive processes underlying reallife situations based on data that provides a detailed capture of naturally-occurring activity.

The move with SEBE from an experimental setting to a natural setting of concrete incidents of practice also encouraged reflection about the social psychological concepts employed. For example, the implementation of formal police practices automatically limits the available number of alternatives for action (fine, arrest,

formal warning) and it also provides clear indicators for when they are reached (you know when you have arrested someone). Therefore, the emphasis MTAP sets on generating alternatives for action and establishing whether an action has been completed is less relevant to formal policing. Rather, the process is centred on connecting a defined legal response to a complex, messy situation. For this reason, formal policing also seems to describe a case where the system 2 of dual process theory becomes a formal requirement. Due process necessitates that officers justify their often intuitive system 1 decisions in an explicit, conscious manner. However, it appears that these deliberate reflections are already nudged by the intuitive decision as the officer aims to find confirmation and therefore authorisation to act upon their intuitive judgements. Therefore, this research has illustrated that when applying the mentioned theories to real world settings it is important to pay due attention to the institutional context of the practice examined. The need to appear in control makes it difficult for officers to back off from initial decisions and at the same time the extensiveness and ambiguity of the law makes it possible to justify most decisions on the level of formal reporting, as long as the officer is sufficiently proficient in providing the right image of activity on the level of documents. At the same time, we developed the argument that operating in accordance with the law when implementing formal procedures is only one of several levels officers have to operate on. Contradicting demand on different levels of activity may therefore create crossconstraints. From this perspective the additional discretion that comes with framing a situation to warrant formal responses may be a necessary prerequisite to optimising the quality of the compromise between demands. However, these observations form part of a larger criminological argument about police practice that we are going to summarise in the next section.

7.2. How to do social control professionally – Criminological Contributions

What we described in the previous sections are practices that anybody who is experienced could apply in order to exercise social control through interaction. However, in the case of officers we need to expand the above as they exert social control in a professional organisational context and have the option to employ formal means. This move also describes a shift from a social psychological focus on human interaction to a criminological focus on the practice of the police. The power to choose between formal and informal mechanisms of social control is key to the notion of discretion. One essential argument developed in this PhD focuses on the nature, function and future position of discretion. In this section we will summarise this argument, and to this end we will also recapitulate the specific resources and constraints that apply to officers in their practice of policing and the essential importance of visibility.

We started from the observation that the many conception of discretion conceives of it as a single-event choice made between the alternatives available to an objectively recognisable and legally defined situation. Consequently, much of the literature on police discretion that is interested in building models focuses on variables we grouped into individual-centred, organisational and circumstantial factors to explain the discretionary choices officers make. From this basis we made the case for a conceptualisation of discretion as a process as opposed to single point in time decision. This allowed a more holistic understanding of discretion in which the relevance of the identified individual-centred, organisational and circumstantial factors can vary in parallel with the different stages of the discretion process. In this effort we provide concrete illustrations with empirical material of earlier sociological studies of police discretion such as Skolnick (1966), Muir (1977) and Chatterton (1983) that still lacked the data to illustrate their insights more concretely.

The process view also allowed us to see that there is a stage of constructing the situation that officers attend, which provides them with additional flexibility in choosing between alternative responses. If a situation always require interpretation and it is not a priori objectively recognisable and legally defined, then officers have leeway in constructing the situation in a way that allows them to respond in the manner they deem most appropriate. Key to the development of a procedural view on discretion use was the reliance on video-as-data as a naturally occurring practice. Video is a real time sequential medium, in other words in maintains the rhythm, order and spacing of acts of the empirical situation for examination on the data level.

In the second paper we moved on to expand on the function of discretion in police practice. It is generally accepted that discretion is about allowing officer judgement in the field, which is necessary for a common sense appreciation of the concrete situation in the face of abstract legal principles and weighing up other factors such as public good will and the cost of processing an offence (Lustgarten, 1986). In the police, discretion can therefore be higher at the lower end of the rank hierarchy, as it is the lower ranks that are on the front-line and therefore are in situ to make these judgments. We picked up on the notion of factors and presented a detailed analysis of different levels officers operate on and how at each of these levels officers can pursue goals that contradict goals on other levels. Further, the different levels have their own logic, enabling and constraining characteristics that officers navigate with associated strategies. The levels we examined loosely followed the installation theory framework (Lahlou, 2008a) and as such were divided into the physical environment, the institutional context and social interaction. In addition, we added the level of time and the image of activity.

Any social activity could be examined on these levels but the fact that we examine the practice of police officers brought to light characteristics of each level that are specific to this practice. On the level of the institutional context we highlighted the requirement for officers to document their activity. Documentation serves the dual purpose of linking individual activity into organisational level activity, as well as legitimising it. With regards to linking officer activity to the police organisation, intelligence reports were identified as a mechanism that allows officers to act upon information they themselves have not collected and enables other officers to act on information they have collected. With regard to legitimising, we argued in line with Latour's work that reports have agency of their own as they produce an image of activity that can have more pragmatic power then the activity itself for the 'out situ' evaluation of that activity. The term icodynmics (Virilio, 2005) was used to describe the process of modifying activity not to change its effect in the situation but its image.

Based on these observations we came to identify the function in the first paper that identified *discretion to reframe the situation* in a more concise manner. It allows officers to choose the quality of the situation they attend. This empowers them to transform a contradictory set of constraints into one that is tractable in the world of action. It therefore enables officers to make acceptable trade-offs between otherwise incompatible goals. It releases some constraints on one dimension – particularly on the institutional level of law and organisational guidance – to enable matching

constraints on another – particular on the situational level of the physical environment and social interaction. Based on these observations we came to suggest that discretion to reframe may not provide officers with undue amounts of leeway, but that it is a prerequisite to act upon an otherwise impossible set of requirements.

Finally, in the third paper we elaborated on the importance of visibility and seeing for the construction of the police. Officers actively managed their visibility and what they are seen to see in public. Members of the public change their behaviour in the presence of officers. Officers are crucially aware of the effect they have on MOP and internalize their reactions to the representation the public has of them in their daily practice. They alter their behaviour, and therefore what they *are* as the police – the public and the police co-construct the police by alternating between the symbolic representation and the physical manifestation of the police. In that sense police practice has an inherent icodynmic element. However, it is essential to note that this icodynmic modification of practice is tailored towards those that are with the officers in situ.

At this point we started to examine the potential effect of the increase of digitally mediated visibility on the discretion to reframe the situation. We noted that other than with written reports there is less of a practice to provide those that evaluate documentation with clues for the appropriate interpretation when it comes to video evidence. While there are signs of the development of such a practice, there is the danger that in the meantime police practice becomes even more icodynmic. However, this time is not tailored for those that are with them in situ, but for those 'out situ' that evaluate their actions. Video evidence may create the illusion that those not present at an incident have the same base to evaluate the situation as those present. This view is problematic for several reasons: firstly, video continues to be a reduced representation of reality that is susceptible to more or less subtle manipulation; also, simply seeing what somebody saw does not automatically also provide the required knowledge for the appropriate interpretation of what is seen. In this regard, the concept of professional vision (Goodwin, 1994) was used to refer to the refined perceptual and interpretive processes that are developed as being part of a community of professionals; finally, video is reviewed with the benefit of hindsight but officers have to record without it.

Taken together, these factors may induce officers to be more legalistic in their practice at the expense of flexibility to solve the issue at hand then and there. The danger is that those that evaluate video evidence of acts of the police do not revisit their preconceptions about what it is the police does and challenge a practice they have not fully understood. We illustrated a process in which officers co-construct the police with the immediately present public by alternating between symbolic representations and internalising them into practice. If in turn officers now internalise these video mediated reactions to the image of their practice in the same manner then the aim of their practice may unduly shift from in situ more to out situ evaluation criteria. However, this is the more pessimistic scenario. Video as data and as evidence provides the potential to explore the complexity involved in policing, and as officers in more detail, as well as finding evidence that the police does not act as one thinks it should. In fact, this research was based on the fact that video and in particular BWV indeed has the potential to help get detailed insights into the practice of the police. We therefore conclude the argument about the nature, function and future of discretion with a call to foster the development of a reflected practice of recoding and viewing video evidence of any professional practice and in particular that of the police. If we follow this route we can have more insightful policing and a public that is better informed about what it actually is the police do.

We developed the above argument about discretion based on empirical data that plays a role in the described challenges to discretion itself. BWV is part of the cameramediated visibility that challenges the use of discretion to reframe the situation. Therefore we can also turn the call for a reflected practice of recoding and viewing video evidence from a societal into a methodological request. The availability of video data will only grow and promises to enable further detailed empirical analysis of police practice. However, using such material has its own challenges and particularly developing an appropriate framework from which to approach such material is not trivial. It is in this regard that we hope that the discussion of the situated approach and associated SEBE methodology, with its emphasis on debriefing interviews, can advance criminological research with social psychological theory and method. Ethnography has a strong tradition in police research and we hope to have shown that combining it with SEBE can be advantageous. As opposed to ethnography, BWV can provide unmediated evidence of the identified practices, and it also allows more detailed and repeated observation of actions. Finally, the debriefing interview provides insights into cognitive processes during natural activity as opposed to the clinical setting of an experiment. Capturing multi modal data of the immediate situation but also soliciting information about the cognitive and organisational processes can develop a multi-faceted understanding of police practice, and this shifts the emphasis from finding single factors that explain what officers do, to an analysis of the interaction between these factors. Conceptually, this is also a shift from identifying the effect of different components of a system in which practice occurs to a more complete appreciation of the entire system that practice occurs in and forms part of.

7.3. Methodological Contribution

Turning around the above argument about a contribution to criminology by advancing the methodical repertoire, applying these methods with policing to a new practice may also have helped to refine the method in itself. With developments such as Google glasses, point of view recordings of activity will increasingly be available for many different practices. What this research has demonstrated is that such naturally occurring point of view video data can be used for SEBE. However, it has also become evident that building a strong relationship that is based on trust with a researched body of professionals continues to be of essential importance. Obtaining simply any point of view recordings, as data is already not difficult – a few hours on YouTube suffice. However, it is key is to be able to talk with those that have produced these recordings in a frank manner and gain an understanding of the institutional setting and process that led to the recoding. It is in this regard that the use of corroborating methods such as ethnography, desk research and focus groups, to name those used in this research, is essential.

If we do not start to build a multi-layered understating of what it is we are seeing on a point of view video, which crucially involves the interpretation of the recording participant, then video can lead to the same reductionist interpretations any other form of data affords. The temptation is to believe that video can speak for itself and indeed it can be a powerful means to illustrate a point. However, what this research has

repeatedly highlighted is that while 'a picture may say a 1000 words' these 1000 words are likely to change with each viewer. It is for this reason that the repeated analysis of the same video data with different research questions and interpretative frameworks may be extremely fruitful. Results then, however, gain validity as much from the interpretative framework and the soundness of the analytical approach as from the video data itself.

With SEBE the debriefing interview is here of essential importance. We are of the view that the acting individual, if enabled properly, has the strongest position to interpret his or her actions. Nonetheless, point of view recordings and video data of activity in general do also permit more behaviouristic analytical approaches. Additionally, for this research we could have coded purely the BWV recordings and left out the debriefings. We are convinced, however, that such an approach would have led to a much more simplistic depiction of police practice. We therefore caution against this type of video analysis unless the researcher can convincingly argue that s/he has the necessary knowledge about the examined practice to analyse footage of it appropriately, which in turn would raise the question why the research is necessary to begin with unless it is gained through other methods and video is only used to illustrate and animate findings. These considerations again make evident that the debriefing stage of SEBE is in part already an analytical process. While this has always been the case, this research has particularly emphasised that SEBE produces these two nested but distinct forms of data; point of view recordings of practice and recordings of debriefing interviews based on the point of view recordings that captures the co-constructive interpretation process of the participant and the researcher.

Some may take issue with the fact that the participants are in this manner are given such a central position in the process of analysing their own activity (Nisbett and Wilson, 1977). Participants are much less involved in the analysis of the second level data but we agree that things can get less orderly, clear-cut or 'objective' when participants are involved in the analysis. Practices turn out to be employed for other purposes than the researchers may have suspected and aspects of practice that were not noticed before take centre stage. In our opinion, the fact that the researcher is forced to revisit their interpretations only highlights the ability of the method to create insight. However, we share the concern that currently the process of gaining these insights may not be sufficiently transparent. At the moment we are lacking the criteria to evaluate the quality and format of the debrief interview. What are the different styles of conducting a self-confrontation interview? When is a participant talking frankly and when is s/he guarded in her account? When is the researcher gaining an insight into the participants practice and when is s/he actually misunderstanding? As these are questions one faces in any interpersonal exchange the researcher may have an intuitive feeling about them. There is also the point of view recording that the participant's account must be consistent with. However, in order to be able to distinguish and communicate good quality SEBE research there is a need to also establish more explicit quality criteria that can be reported in written up research.

This research has advanced the SEBE method by being the first to emphasise the benefit of explicitly considering the temporal dimension of practice in its analysis. Other research has pointed towards the often anticipatory character of activity (Cordelois, 2010). However, the deliberate sequencing of acts, the deliberate timing of acts and the understanding of the progression of time in itself being enabling or hindering in practice has not before and still is not yet fully examined. Conversation and workplace interaction analysis have both emphasised the relevance of sequence in talk and activity before. However, as studies in this tradition usually do not solicit cognitive processes (no debriefing interview) they cannot shed light on planning that anticipates. They miss those moments of anticipating that result in desired 'noneevent' as in such situations 'action' mainly occurs on the mental level. For example action to avoid trouble might be very subtle, moving people in a certain direction or changing the tone of voice on a physical level, however, is likely to be careful planned mentally. A researcher that does not already know what s/he is looking for is unlikely to note such potentially essential none-actions on video data alone. In addition, the way sequencing of acts is explored instead focuses on how each act gains meaning in relation to the other acts and it is therefore more on the micro level and less on the level of deliberate planning and anticipation. Mindset theory of action phases proved in this regard to be more applicable.

7.4. So what? – Relevance of the research for policy and practice

Besides elaborating on the theoretical and methodological relevance of this research, we would also like to pose the 'So what?' question about its practical significance and implications. We have emphasised the engagement with a socially essential practice (policing), changes in technology, the use of empirical material (BWV) and emerging social phenomena (New Visibility) throughout the work; in addition, we will now offer our opinion on what sound policy responses to these changes could look like and how this research may have contributed to their advancement.

With regards to our argument about the nature, function and future of police discretion, we developed a more positive and a more negative scenario about the effects of video evidence on practice. We suggested that video evidence makes police behaviour more visible and if used badly allows those evaluating police practice to challenge with hindsight acts that officers took when they were 'practicing forward'. Continuous challenging in this manner may lead to policing becoming more icodynamic, done by the letter, and risk adverse. An alternative, more optimistic view is that video could also allow a better appreciation of the multiple constraints officers operate under (as a matter of fact this research relied on video for this very purpose), the information officers had available at the time, and the context dependent validity of their acts. However, this would require both camera mediated visibility and seeing to become a reflected practice. So what, then, could these more reflected practices look like?

With regard to recoding of evidence with BWV and similar devices, officers may want to provide a running commentary of their thinking process and the information they process at the moment of recording. This would provide scaffolding for viewer interpretation of high validity because it was provided then and there. Such commentary provides what the officer could immediately verbalise in the moment of recording and has therefore more validity than interpretations that are provided with hindsight. We also need to acknowledge that video is an inherently different form of evidence than officer reports. Reports, even when written then and there, are produced within an existing practice of producing this kind of evidence and with at least partial hindsight. Officers use phrases and structures for reports that are tailored to the CJS and shape the evidence for appropriate interpretation. Moreover, reports are written when officers are at the 'writing up phase' of an incident, not consciously throughout the incident from beginning to end. With time, the police may develop a practice of talk-out-loud commentary that becomes similarly scripted to report writing. This would be problematic in so far as the talk out loud protocol then may only elicit what officers learned to say in the kind of situation they record and not what they actually process. However, arguably, this describes what already is the case for report writing. This became evident when we illustrated that officers need to actively manage the image of their practice as captured in reports in order to be able to strike a compromise between keeping an 'appearance of due process' and responding appropriately to the concrete situation. Nonetheless, such video commentary could never have the same benefit of hindsight as report writing, which provides less scope for it to be strategically partial.

Viewers on the other hand need to be made aware of the subjectivity of video evidence – and the extent to which their judgement of this evidence is dependent on interpretation. Therefore they need to strive to also be able to make explicit and justify how they come to their interpretation of the video as with any other evidence because also video is not self-explanatory. An effort to develop such a practice may bear similarities to analysing video in research on practice. There needs to be an interpretative framework that makes explicit on what bases specific information that is an element of the recordings is highlighted. Only with such a framework can a level of consistency and accountability be maintained. If we cannot agree on a general understating of what may and may not be valid inferences and extrapolations from video evidence about the actions and intentions of the recoding and recoded individuals, then these judgments are inherently arbitrary. Discussions should of course be had about the nature of this interpretative framework, but having them on the conceptual level as opposed to case-by-case allows for boarder and more inclusive thinking. In such discussions, different socially situated viewpoints will clash. We highlighted that being a police officer comes with the development of a professional vision (Goodwin, 1994). It probably does not come as a surprise to the reader that we advocate that this professional perspective is shared in the advocated debate. At the same time we are acutely aware that it is at least as important to have other potentially less organised perspectives shared as well – we are thinking particularly of those that are often at the receiving end of police activity. As these communities are often the most marginalised in society we also know that they it may be difficult to ensure that their voice is heard. Nonetheless, a discussion that goes beyond focusing on purely technical standards to ensure that the video was not tampered with, but that appreciates the social dimension of seeing and interpreting 'objective' video data seems crucially important and worthwhile.

In this research there are also practical lessons about the unintended side effects of introducing new technology, particularly visibility increasing technology, into a professional practice. BWV was originally introduced to gather 'best evidence' (Home-Office, 2007b). While this is still one of the main purposes put forward, highlighting their behaviour modifying effects both for MOP and officers has become more central to the debate. In fact, what we described as the danger of more static and legalistic police practice as the result of increased visibility is often heralded as a potential to make policing more transparent, accountable and professional. We understand the logic behind these arguments and understand that evidence is emerging that BWV devices indeed reduce complaints brought against officers, as well as officer's use of force (forthcoming research on the police force in Rialto, California and the Isle of Wight is here particularly relevant). What these observations suggest to us is that BWV modifies police behaviour in different ways that we do not yet understand completely. It may be that officers that are prone to an inappropriate use of force are moderated in their behaviour by the presence of BWV, while skilful officers are constrained in their practice by it as well. In addition, complaints and use of force are relatively rare events that get much attention (and rightly so). However, the argument we presented around the potential loss of discretion by the increase in camera mediated visibility focused more on subtle changes to everyday policing practice that while no less important may be less noted. In this way BWV could result in a more 'standardised' but not necessarily overall better service. Further, our analysis suggested that it is essential for officers to learn to navigate and negotiate constraints. We may therefore expect that with time both types of officers will develop strategies to at least mitigate the constraints BWV poses to their way of practicing. Maybe the devices 'break', they film in the wrong direction or officers learn to make things look one way when they are actually another (icodynamics).

The question is whether policy can be developed that encourages the positive adaptations to BWV and mitigates the negative once. For this purpose a more thorough reflection about the intentions and effects of BWV seems necessary. It appears that there are a variety of other purposes that BWV could be used for, such as the change of reporting procedures and use for training, but it is not clear if there is an intention to let them materialise or not. However, as long as there is no understanding of the intentions behind introducing BWV there cannot be a debate about the appropriateness of these uses. If one purpose of using BWV is to monitor officers then this should be made explicit. Officers would then have an opportunity to challenge this agenda. Only then could emerging debate procedures be developed that specify what monitoring is appropriate and beneficial and what not and in what situations and for what type of complains should BWV footage be reviewed and by whom?

Additionally, it should probably be at the officers' discretion to turn the device on and off. Such a policy, however, should be accompanied by a developed understating of the conditions that require justification for either of these choices and what represents such appropriate justification. Without such clarification, BWV only creates a feeling of being distrusted and uncertainty amongst officers. To counter such sentiments, officers that feel that the presence of BWV is not conducive to the quality of their policing of an incident should be allowed to turn the device off. However, if then the quality of their policing turns out to be exceptionally low they should be expected to be able to account for it. Conversely, when an officer expects a situation to escalate they should feel that it is in their interest to record it with BWV. The problem is only that situation that may be better policed without BWV could also be those incidents that are more likely to escalate. To differentiate the two without hindsight may be challenging. Appropriate training in the use of the device is therefore essential. How BWV device are operated is quickly explained, but as this research illustrates a PhD can be written about the effects it may have on police practice and officer interaction with the public.

This brings us to a final potential real world application of BWV and this research we would like to mention – the use for training. The use of SEBE in unison with BWV data allows street level officers to make explicit and illustrate know-how they have

developed on the job, and at the same time illustrates how they apply it in practice. In the process of analysing BWV with SEBE, material is developed that could be used to teach the identified practices to others. Selected BWV clips with the commentary of the officers that recorded them can illustrate to novice officers how situations could play out and what officers could do to control them and that in a very immersive and realistic way that most other currently used training material would fail to replicate.

7.5. Outlook

In this last section we will reflect on areas for improvement in the current research that will lead into a discussion of potential future research that we see as worthwhile to pursue.

7.5.1. Areas to improve present research

A key element missing in this research is an unmediated engagement with the perspective of the members of the public. We have explored the perspective of officers in multiple ways because it was our goal to understand their practice. However, in this endeavour it has become apparent that much of their practice is geared towards and constructed in exchange with members of the public. Indeed, a central argument we developed focused on the effects of internalising reactions of MOP by officers for their practice. To close and solidify this line of reasoning, the reactions MOP display around officers and how they judge officers should be a distinct part of this research. However, we have only included the perspective of those policed in so far as that we considered reactions by MOP to policing practice as displayed on BWV footage and only to the extent that they were seen and interpreted by the interviewed officers. The footage of the Anonymous protest against Scientology that was mentioned in the third empirical paper is here the exception. It was recorded, edited, commented on and publicly made available by the protesters. Using this material and BWV footage of the same incident, illustrated the usefulness of exploring the same events from different perspectives. It allows the identification of divergence in interpretation of situations and illustrates how perspectives may clash in the construction of incidents. We have not used more material from MOP because it is difficult to find situations for which material from both sides is available and in which both recording parties can be identified and agree to comment on. It may nonetheless be a worthwhile route to pursue and demonstrations seem to be a promising starting point to find such incidents as they present situations where interaction between officers and MOP are likely to occur, both sides often have an interest in recording their encounters and have their interpretation of it heard. However, one then needs to consider that such events are only one of many types of situation that officers attend to.

Another limitation of the research at hand concerns its sampling strategy. The use of naturally occurring material (which is at the same time also a strong point of this research) required pragmatic sampling decisions in the field and precluded any attempts to build a sample that would allow the making of inferences about the frequencies and distributions of identified practices. It would of course be very interesting to be able to say something about how prevalent the strategies of policing described in this work are. The fact that many of the identified practices resonate with existing research of the police, and that what is seen on the material does not appear to be out of place or uncommon lets us hypothesis that the identified practices find regular application. However, further research is needed to confirm this. This should be research that can be more systematic in its sampling approach as well as research that utilises a similar SEBE methodology but focuses on police forces that operate in different environments.

The focus of this research has been on urban policing in the UK. This provides a very specific cultural, institutional and physical setting. We have also argued that these are precisely some of the key variables that shape policing. A stronger case for the relevance of these variables could be made if we alternated them and could then trace effects of these changes in officer practice. The data to do this form of research is increasingly available. Police forces around the world have started to use BWV and could be approached to replicate the present research. We have refrained from attempting to include such comparisons as part of the present research and have rather focused available resources on having a more in-depth study of policing practice within one national context.

We have repeatedly highlighted the importance of contextualising SEBE research with other research methods and doing this for one national context alone was already a considerable commitment. Therefore, while we advocate expanding the present research to include other forces, we would also like to stress that the increase in quantity should not be at the expense of the quality of the research. In this regard, we could also have been more focused on developing clear quality criteria for SEBE. We tried to reflect on the methodological choices we took and the analytical procedures we implied whenever reasonable. However, we also acknowledge that still more could be done in order to enable the reader to be able to replicate and evaluate the research. This is particularly important for a new and emerging method such as SEBE. This shortcoming can partly be explained by the tension of doing a PhD with a methodological and substantial focus that cuts across social psychology and criminology. The interdisciplinary nature of the research certainly had its advantages and created synergies. However, having 'many masters' can also make it difficult to explore the literature, methods and varied substantial issues with the depth they deserve and frame them appropriately.

7.5.2. Future research

An agenda for future research follows in many ways naturally from the above section and the conclusion chapter in general. Most salient is the need to continue to monitor the impact of new visibility in general, and BWV in particular, on police practice. In our argument about discretion we highlighted the potential negative unintended effect of BWV and the same time we pointed out that BWV could find wider and more positive application (e.g. for training). Continuous observation by the research community may in this regard help to ensure that BWV realises more of its positive rather than negative potential. Such research could then also take up the areas for improvement explored above: to investigate the use of BWV in other national contexts; combine research with methods that allow more conclusions about the frequencies and distributions of identified practices; and make efforts to include the unmediated perspective of MOP.

A more psychology focused research agenda may like to consider the exploration of other practices with the SEBE methodology. Theoretically exploring the relevance of the temporal dimension for police practice identified by this research also for other practices seems a worthwhile pursuit. The increasing availability of naturally occurring POV recordings may enable such an endeavour. To investigate more carefully the memory enhancing qualities of being confronted with such material of one's own activity is in this regard a central element of SEBE that is currently weak on evidence. This could be part of a larger effort to identify and apply more explicit quality criteria and analytical procedures for SEBE. This would also require exploring more broadly the implications of different analytical frameworks and research questions for the types of conclusions that can be drawn from POV video data. In this context, to develop a corpus of POV video data and debriefing interviews has also the potential to help find answerers to diverse questions about human activity, precisely because video is such rich data that affords analysis from a variety of theoretical perspectives.

This research has illustrated that combing criminological research interests with increasingly available video data and social psychological theory and methods allows exploration of current police practices and emerging social processes in new detail. We encourage other researchers to benefit from these developments. It is a privilege to have been given the opportunity to understand the world literally from an officer's perspective, to a researcher it is a unique opportunity to understand the world anew.

References

- Afitska, O. (2009). Transana 2.30 from Wisconsin Center for Education Research Language, Documentation & Conservation, 3(2), 226-235.
- Alpert, G. P., Macdonald, J. M., & Dunham, R. G. (2005). Police suspicion and discretionary decision making during citizen stops. *Criminology*, 43(2), 407-434.
- Anti-Scientologie. (2008). Operation Fair Gamestop. Retrieved 02. 04. 2011, 2011, from http://www.anti-scientologie.ch/anonymous-london-protest-may-2008.htm#H
- Associated_Press. (2009). San Jose police mount cameras on officer heads Retrieved 19. Feb, 2010, from http://www.katu.com/news/tech/80269157.html
- Attride-Stirling, J. (2001). Thematic networks: an analytic tool for qualitative research. *Qualitative Research*, 1(3), 385-405.
- Banton, M. (1964). The Policeman in the Community. London: Tavistock.
- Bateson, G., Jackson, D. D., Haley, J., & Weakland, J. (1956). Toward a theory of schizophrenia. *Behavioral Science*, 1(4), 251-264.
- Bauer, M. W., & Aarts, B. (2000). Corpus Construction: a Principle for Qualitative Data Collection In M. W. Bauer & G. Gaskell (Eds.), *Qualitative researching with text, image and sound: a practical handbook* (pp. x, 374 p.). London: SAGE.
- Bauer, M. W., & Gaskell, G. (1999). Towards a paradigm for research on social representations. *Journal for the Theory of Social Behaviour, 29*(2), 163-186.
- Bauer, M. W., & Gaskell, G. (2000). *Qualitative researching with text, image and sound: a practical handbook.* London: SAGE.
- Bavelas, J., Gerwing, J., Sutton, C., & Prevost, D. (2008). Gesturing on the telephone: Independent effects of dialogue and visibility. *Journal of Memory and Language*, 58(2), 495-520.

- Bentham, J., & Bozovic, M. (1995). *The Panopticon writings*. London ; New York: Verso.
- Bezemer, J., & Jewitt, C. (2010). Multimodal analysis: key issues'. In L. Litosseliti (Ed.), *Research Methods in Linguistics* (pp. 180-197). London: Continuum.
- Birdwhistell, R. (1970). *Kinetics and Context: Essays on Body Motion Communication*: University of Pennsylvania Press.
- Bittner, E. (1967). The Police on Skid-Row: A Study of Peace Keeping. *American* Sociological Review, 32(5), 699-715.
- Bittner, E. (2005). Florence Nightingale in pursuit of Willie Hutton. In T. Newburn (Ed.), *Policing: key readings* (pp. xiv, 834 p.). Cullompton, Devon ; Portland, Or.: Willan Pub.
- Bittner, E., & Bish, R. L. (1975). The functions of the police in modern society: a review of background factors, current practices, and possible role models. Seattle: University of Washington Press.
- Black, D. J., & Reiss, A. J. (1967). Patterns of behavior in police and citizen transactions. Ann Arbor, MI.
- Blackman, J. (2008). Omniveillance, Google, Privacy in Public, and the Right to Your Digital Identity: A Tort for Recording and Disseminating an Individual's Image over the Internet. Santa Clara Law Review, 49, 313.
- Blaikie, N. W. H. (1991). A critique of the use of triangulation in social research. Quality & Quantity, 25(2), 115-136.
- Blau, P. M. (1955). *The dynamics of bureaucracy: A study of interpersonal relations in two government agencies*: Chicago, U. P.
- Blau, P. M. (1974). On the nature of organizations: Wiley New York:.
- Bödker, S. (1989). Human activity approach to user interfaces. *Human–Computer Interaction, 4*, 171–195.

- Bödker, S. (1991). Activity theory as challenge to system design. Paper presented at the Information System Research: Contemporary Approaches and Emergent Traditions. Proceedings of the IFIP TC 8/WG 8.2 Working Conference., openhagen.
- Boivin, R., & Ouellet, F. (2011). Variations in police recording practices across time and space: The case of Montreal. L'enregistrement des infractions par la police varie-t-il dans le temps et dans l'espace: Le cas de montreal, 64(3), 311-328.
- Boring, E. G. (1953). A History of Introspection. *Psychological Bulletin*, 50(3).
- Bradford, B. (2009). From personal experience to moral identification: The roots of trust, confidence and police legitimacy London School of Economics, London
- Bradford, B., & Jackson, J. (2011). Why Britons Trust their Police. Books & Ideas,.
- Bradford, B., Jackson, J., & Stanko, E. A. (2009). Contact and Confidence: Revisiting the Impact of Public Encounters with the Police. *Policing and Society*(19), 20-46.
- Brighenti, A. (2007). Visibility A category for the social sciences. *Current Sociology*, 55(3), 323-342.
- Brighenti, A. M. (2012). New Media and Urban Motilities: A Territoriologic Point of View. Urban Studies, 49(2), 399-414.
- Brodeur, J. P., & Forum, P. E. R. (1998). *How to recognize good policing: problems and issues*: Police Executive Research Forum.

Brodeur, J.-P. (2010). The Policing Web. New York: Oxford University Press.

Brown, K. M., Dilley, R., & Marshall, K. (2008). Using a Head-Mounted Video Camera to Understand Social Worlds and Experiences. *Sociological Research Online, 13*(6). Retrieved from http://www.socresonline.org.uk/13/6/1.html

- Brown, K. M., Dilley, R., & Marshall, K. (2008). Using a Head-Mounted Video Camera to Understand Social Worlds and Experiences. *Sociological Research Online*, 13(6).
- Bullock, K. (2010). Improving accessibility and accountability—neighbourhood policing and the policing pledge. *Safer Communities*, *9*(1), 10-19.
- Büscher, M. (2005). Social Life Under the Microscope? Sociological Research Online, 10(1).
- Cadenbach, C., & Fellmann, M. (2011, 01. 05. 2011). Ein Job zum Davonlaufen. Sueddeutsche Zeitung Magazin.
- Cain, M. E. (1973). Society and the policeman's role. London: Routledge and Kegan Paul.
- Campbell, D. T., & Fiske, D. W. (1959). Convergent and discriminant validation by the multitrait-multimethod matrix. *Psychological Bulletin*, *56*(2), 81.
- Campbell, D. T. (1964). *Distinguishing differences of perception from failures of communication in cross-cultural studies*.
- Carrabine, E. (2012). JUST IMAGES Aesthetics, Ethics and Visual Criminology. *British Journal of Criminology*, 52(3), 463-489.
- Carter, T. J. (2006). police use of discretion: a participant observation study of game wardens. *Deviant Behavior*, 27(6), 591-627.
- Chappell, A. T., MacDonald, J. M., & Manz, P. W. (2006). The organizational determinants of police arrest decisions. *Crime & Delinquency*, 52(2), 287-306.
- Chatterton, M. R. (1983). Police Work and assault charges. In M. Punch (Ed.), *Control in police organisation*. Cambridge, Mass: MIT Press.
- Chatterton, M. R. (1989). Managing paperwork. In M. Weatheritt (Ed.), *Police Research: Some Future Prospects*. Aldershot: Avebury.

- Chatterton, M. R., & Rogers, M. (1989). Focused policing In R. Morgan & J. David J. Smith (Eds.), Coming to Terms with Policing: Perspectives on Policy: Routledge.
- Christensen, U. (2001). Conventions and articulation work in a mobile workplace. ACM SIGGROUP Bulletin 22(3), 16–23.
- Cicourel, A. V. (1964). *Method and measurement in sociology*. [New York: Free Press of Glencoe.
- Cicourel, A. V. (1968). *The Social Organization of Juvenile Justice*. New York John Wiley & Sons.
- Cicourel, A. V. (1973). Cognitive Sociology. Hardmondworth: Penguin.
- Cicourel, A. V. (1992). The interpretation of Communicative Context: Examples from Medical Encounters. In A. Duranti & C. Goodwin (Eds.), *Rethinking context: language as an interactive phenomenon*. Cambridge:: Cambridge University Press.
- Cicourel, A. V. (2009). John Rawls on Two Concepts of Rules: Some Speculations about Their Ecological Validity in Behavioral and Social Science Research. *Journal of Classical Sociology*, 9(4), 371-387.
- Cicourel, A. V. (2011). Origin and demise of socio-cultural presentations of self from birth to death: Caregiver "scaffolding" practices nesseary for guiding and sustaining communal social structure throughout the life cycle *Paper presented at the LSE in May 2011*.
- Clot, Y. (1999). La fonction psychologique du travail. Paris: PUF.
- Clot, Y., Faita, D., Fernandez, G., & Schneller, L. (2001). Enreriens en autoconfrontation croisee: une methode en clinique de l'activite. *Education Permanente*, 146(1), 17-25.
- Coates, S., Kautt, P., & Mueller-Johnson, K. (2009). Penalty notices for disorder: influences on police decision making. *Journal of Experimental Criminology*, 5(4), 399-428.

- Cooperrider, D. L., & Srivastva, S. (1987). Appreciative inquiry in organizational life. *Research in organizational change and development, 1*, 129-169.
- Cordelois, A. (2010). Using digital technology for collective ethnographic observation: an experiment on 'coming home'. *Social Science Information Sur Les Sciences Sociales, 49*(3), 445-463.
- Cranach, M. v. (1982). *Goal-directed action*. London: Academic Press in cooperation with European Association of Experimental Social Psychology.
- Cranach, M. v., E., M., & V., S. (1985). The Organisation of Goal-Directed Action: A Research Report. In G. P. Ginsburg, M. Brenner & M. v. Cranach (Eds.), *Discovery strategies in the psychology of action* (pp. 19-61). London: Published in cooperation with European Association of Experimental Social Psychology by Academic.
- Cranach, M. v., & Kalbermatten, U. (1982). The Ordinary interactive action: theory, methods and some empirical findings. In M. v. Cranach & R. Harre (Eds.), *The Analysis of Action* (pp. 115-160). London: Cambridge University Press.
- Crandall, B., Klein, G. A., & Hoffman, R. R. (2006). *Working minds: a practitioner's guide to cognitive task analysis*. London: MIT Press.
- D'Andrade, R. G. (1981). The cultural part of cognition. *Cognitive Science*, 5(3), 179-195.
- Davenport, T. H., & Prusak, L. (2000). Working knowledge: how organizations manage what they know: Boston.
- Davis, K. (1969). Discretionary Justice. Baton Rouge: Louisiana State U.P.
- Dejong, C., Mastrofski, S. D., & Parks, R. B. (2001). Patrol officers and problem solving: An application of expectancy theory. *Justice Quarterly*, *18*(1), 31-61.
- Dennis, K. (2008). Keeping a close watch the rise of self-surveillance and the threat of digital exposure. [Editorial Material]. *Sociological Review*, *56*(3), 347-357.

- Derry, S. J. (2007). Video Research in Classroom and Teacher Lerning (Standardize That!). In R. Goldman, R. Pea, B. Barron & D. S. J. (Eds.), *Video research in the learning sciences* (pp. xiii, 603 p.). Mahwah, N.J.: Lawrence Erlbaum Associates, Inc.
- Dhani, D. (2012). *Home Office Statistical Bulletin Police Service Strength*.
- Dixon, D., Bottomley, A. K., Coleman, C. A., Gill, M. D., & Wall, D. (1989). Reality and Rules in the Construction and Regulation of Police Suspicion. *International Journal of the Sociology of Law*, 17(2), 185-206.
- Doyle, A. (2003). *Arresting images: Crime and policing in front of the television camera*: University of Toronto Press.
- Doyle, A., Lippert, R., & Lyon, D. (2012). *Eyes everywhere: The global growth of camera surveillance*: Routledge.
- Duchowski, A. (2007). Eye Tracking Methodology: Theory and Practice: Springer.
- Engeström, Y., & Middleton, D. (1996). *Cognition and Communication at Work*. Cambridge: Cambridge University Press.
- Ericson, R. V. (2007). Rules in policing Five perspectives. *Theoretical Criminology*, *11*(3), 367-401.
- ESRC. (2010). *Framework for Research Ethics*. Swindon Economic and Social Research Council.
- Farough, S. D. (2006). Believing is seeing The matrix of vision and white masculinities. *Journal of Contemporary Ethnography*, 35(1), 51-83.
- Faverge, J. M. (1970). L'homme agent d'infiabilité et de fiabilité du processus industriel. *Ergonomics*, *13*(3).
- Fielding, N. (2013). Working in Hostile Environments. In B. Smart, K. Peggs & J. Burridge (Eds.), Observation Methods London: Sage.
- Fielding, N. G. (2011). Judges and Their Work. Social & Legal Studies, 20(1), 97-115.

Flick, U. (2009). An Introduction to Qualitative Research: Sage.

Foucault, M. (1977). Discipline and punish: the birth of the prison. London: Penguin.

- Frank, J. R., & Danoff, D. (2007). The CanMEDS initiative: implementing an outcomes-based framework of physician competencies. *Medical teacher*, 29(7), 642-647.
- Fraser, M., Hindmarsh, J., Best, K., Heath, C., Biegel, G., Greenhalgh, C., et al. (2006). Remote Collaboration Over Video Data: Towards Real-Time e-Social Science. *Comput. Supported Coop. Work*, 15(4), 257-279.
- Galanter, M., Palen, F. S., & Thomas, J. M. (1979). CRUSADING JUDGE -JUDICIAL ACTIVISM IN TRIAL COURTS. Southern California Law Review, 52(3), 699-741.
- Ganascia, J.-G. (2010). The generalized sousveillance society. *Social Science Information*, 49(3), 489-507.
- Garfinkel, H. (1991). Studies in Ethnomethodology: John Wiley & Sons.
- Gaskell, G., & Bauer, M. W. (2000). Towards Public Accountability: beyond Sampling, Reliability and Validity. In M. W. Bauer & G. Gaskell (Eds.), *Qualitative researching with text, image and sound: a practical handbook* (pp. 337-350). London: SAGE.
- Gibbs, G. R., Friese, S., & Mangabeira, W. C. (2002). *The Use of New Technology in Qualitative Research. Introduction to Issue 3(2) of FQS* (Vol. 3).
- Gibson, J. J. (1950). The Perception of the Visual World: Houghton Mifflin.
- Gibson, J. J. (1963). The useful dimensions of sensitivity. *American Psychologist*, 18(1), 1-15.
- Gibson, J. J. (1966). *The Senses Considered as Perceptual Systems*. Boston, MA: Houghton.

- Gibson, J. J. (1967). Notes on affordances. In E. Reed & R. Jones (Eds.), *Reasons for realism. Selected Essays of James J. Gibson* (pp. 401-418). London: Lawrence Erlbaum Associates.
- Gibson, J. J. (1986). *The ecological approach to visual perception*: Lawrence Erlbaum Associates, Incorporated.
- Giddens, A. (1988). Goffman as a systematic social theorist. In P. Drew & A. J.
 Wootton (Eds.), *Erving Goffman: exploring the interaction order* (pp. iv,298p). Cambridge: Polity.
- Gigerenzer, G. (2008). *Gut Feelings: Short Cuts to Better Decision Making*: Penguin Books Limited.
- Goffman, E. (1958). *The presentation of self in everyday life*. Edinburgh: University of Edinburgh, Social Sciences Research Centre.
- Goffman, E. (1961). *Encounters: two studies in the sociology of interaction*. Indianapolis: Bobbs-Merrill.
- Goffman, E. (1967). *Interaction ritual: essays in face-to-face behavior*. London ; Chicago: The Penguin Press: Aldine.
- Goffman, E. (1971). *Relations in public: microstudies of the public order*. London: Allen Lane.
- Goldsmith, J. (2010). Policings's New Visibility. *The British Journal of Criminology* 50(5), 914-934.
- Goldstein, J. (1960). Police Discretion Not to Invoke the Criminal Process: Low-Visibility Decisions in the Administration of Justice. *The Yale Law Journal*, 69(4), 543-594.
- Gollwitzer, P. M. (1990). Action phases and mind-sets. In E. T. Higgins & R. M. Sorrentino (Eds.), *Handbook of motivation and cognition: Foundations of social behavior, Vol. 2.* (pp. 53-92). New York, NY, US: The Guilford Press.

- Gollwitzer, P. M. (2011). Mindset Theory of Action Phases. In P. A. M. V. Lange, A.
 W. Kruglanski & E. T. Higgins (Eds.), *Handbook of theories of social* psychology. Volume 1 (pp. 526-546). London: SAGE.
- Goodwin, C. (1994). Professional Vision. American Anthropologist, 96(3), 27.
- Goodwin, C. (1995). Seeing In-Depth. Social Studies of Science, 25(2), 237-274.
- Grabe, M. E., & Kamhawi, R. (2006). Hard wired for negative news? Gender differences in processing broadcast news. *Communication Research*, 33(5), 346-369.
- Greeno, J. G. (2006). Leaning in Activity. In R. K. Sawyer (Ed.), *The Cambridge handbook of the learning sciences* (pp. 79-96). Cambridge: Cambridge University Press.
- Greer, C., & McLaughlin, E. (2010). We Predict a Riot?: Public Order Policing, New Media Environments and the Rise of the Citizen Journalist. *British Journal of Criminology*, 50(6), 1041-1059.
- Greer, C., & McLaughlin, E. (2011). 'Trial by media': Policing, the 24-7 news mediasphere and the 'politics of outrage'. *Theoretical Criminology*, 15(1), 23-46.
- Greer, C., & McLaughlin, E. (2012). 'This is not Justice' Ian Tomlinson, Institutional Failure and the Press Politics of Outrage. *British Journal of Criminology*, 52(2), 274-293.
- Grice, H. P. (1979). Logic and conversation. Communications,, 30, 57-72.
- Haggerty, K. D., & Ericson, R. V. (2000). The surveillant assemblage. *British Journal of Sociology*, 51(4), 605-622.
- Headland, T., Pike, K., & Harris, M. (1990). *Emics and Etics: The Insider/Outsider* Debate. Newbury Park, CA: Sage.
- Heath, C., Hindmarsh, J., & Luff, P. (2010). Video in qualitative research: Analysing social interaction in everyday life. London: Sage.

- Heath, C., Knoblauch, H., & Luff, P. (2000). Technology and social interaction: the emergence of 'workplace studies'. *British Journal of Sociology*, 51(2), 299-320.
- Hibbert, K., & Rich, S. (2006). Virtual Communities of Practice. In J. Weiss, J. Nolan, J. Hunsinger & P. Trifonas (Eds.), *The international handbook of virtual learning environments* (Vol. 1, pp. 563-579). Dordrecht ; [Great Britain]: Springer.
- Hindmarsh, J. (2008). Distributed Video Analysis in Social Research. In N. Fielding,R. M. Lee & G. Blank (Eds.), *The SAGE handbook of online research methods*. Los Angeles [Calif.]: SAGE.
- Hindmarsh, J., & Heath, C. (2000). Sharing the tools of the trade The interactional constitution of workplace objects. *Journal of Contemporary Ethnography*, 29(5), 523-562.
- HMIC. (2011). Demanding Times The front line and police visibility
- Hohl, K. (Forthcoming). The Role of the Mass Media in Public Trust in the Police. InJ. Jackson, B. Bradford, E. Stanko & K. Hohl (Eds.), *Just Authority? Public Trust and Police Legitimacy*. London Routledge.
- Holdaway, S. (1983). Inside the British police: a force at work. Oxford: Basil Blackwell.
- Home-Office. (1993). Police Reform: A Police Service for the Twenty-First Century. White Paper.
- Home-Office. (2007a). More police head cameras to help fight crime. Retrieved 15.09, 2009, from http://press.homeoffice.gov.uk/press-releases/police-head-cameras
- Home-Office. (2007b). National Manual of Guidance for the Police Use of Body Worn Video Devices. *Police and Crime Standards Directorate* Retrieved 15.08, 2009, from http://police.homeoffice.gov.uk/publications/operationalpolicing/guidance-body-worn-devices?view=Binary

- Howe, R. B. K. (1991). Introspection: A Reassessment. New Ideas in Psychology, 9(1), 25-44.
- Hoyle, C. (1998). *Negotiating domestic violence: Police, criminal justice, and victims*: Clarendon Press Oxford.
- Hutchins, E. (1995). Cognition in the Wild. Cambridge, MA: MIT Press.
- Hutchins, E. L. (1995). How a cockpit remembers its speed. *Cognitive Science*, 19, 23.
- IPCC. (2012). *Police complaints: statisitcs for England and Wales*. London: Independent Police Complaints Commission.
- Jackson, D. (1967). Schizophrenia: The nosological nexus. Paper presented at the Excerpta Medica International Congress, The Origins of Schizophrenia, Rochester, New York.
- Jackson, J., Bradford, B., Stanko, E., & Hohl, K. (2012). *Just Authority? Public Trust and Police Legitimacy*. London Routledge.
- Jackson, J., & Sunshine, J. (2007). Public Confidence in Policing: A Neo-Durkheimian Perspective. *British Journal of Criminology*, 47(2), 214-233.
- James, W. (1890). Principles of Psychology. New York: Holt.
- Jewitt, C. (2008). *Technology, literacy and learning: A multimodal perspective*. London: Routledge.
- Jewitt, C. (2011). Editorial. International Journal of Social Research Methodology, 14(3), 171-178
- Jones, T., Newburn, T., & Smith, D. (2012). Democracy, Police and Crime Commissioners. In T. Newburn & J. Peay (Eds.), *Policing: politics, culture* and control. Oxford: Hart Publishing.
- Joore, P. (2008). Social aspects of location-monitoring systems: the case of Guide Me and of My-SOS. *Social Science Information*, *47*, 253-274.

- Kahan, D., Hoffman, D. A., & Braman, D. (2008). Whose Eyes Are You Going to Believe: Scott v. Harris and the Perils of Cognitive Illiberalism.
- Kahneman, D. (2003). A perspective on judgment and choice: mapping bounded rationality. *The American psychologist, 58*(9), 697–720.
- Kahneman, D. (2011). Thinking, Fast and Slow: Farrar, Straus and Giroux.
- Kaptelinin, K., Kuutti, L., & Bannon, L. (1995). *Activity Therory: Basic Concepts and Applications*. Paper presented at the 5th International Conference EWHCI.
- Kim, A. (Ed.) (2006) The Stanford Encyclopedia of Philosoph.
- Klein, G. A. (1993). A recognition-primed decision (RPD) model of rapid decision making. In G. A. Klein, J. Orasanu, R. Calderwood & C. E. Zsambok (Eds.), *Decision making in action: models and methods*. Norwood, CT: Ablex.
- Klein, G. A., Calderwood, R., & Macgregor, D. (1989). Critical decision method for eliciting knowledge. Systems, Man and Cybernetics, IEEE Transactions on, 19(3), 462-472.
- Kleinig, J., & Zhang, Y. (1993). *Professional Law Enforcement Codes: A Documentary Collection*: Greenwood Publishing Group, Incorporated.
- Knoblauch, H., & Schnettler, B. (2012). Videography: analysing video data as a 'focused' ethnographic and hermeneutical exercise. *Qualitative Research*, 12(3), 334-356.
- Knoblauch, H., Schnettler, B., Raab, J., & Soeffner, H.-G. (2006). Video Analysis: Methodology and Methods: Qualitative Audiovisual Data Analysis in Sociology. Frankfurt: Peter Lang.
- Koskela, H. (2003). 'Cam Era' the contemporary urban Panopticon. *Surveillance & Society*, *1*(3), 292-313.
- Kress, G., Jewitt, C., Jones, K., Bourne, J., Franks, A., & Hardcastle, J. (2005). *English in urban classrooms*. London: Routledge.

- LaFave, & Wayne. (1962). Police and Nonenforcement of the Law Part II, The;. Wisconsin Law Reiew., 179.
- Lahlou, S. (1998). Faire face à la double contrainte dans les organisations. *Bulletin d'Information des cadres EDF-GDF, 35*(1), 37-47.
- Lahlou, S. (1999). Observing Cognitive Work in Offices. In N. Streitz, J. Siegel, V.
 Hartkopf & S. Konomi (Eds.), *Lecture Notes in Computer Science 1670: Cooperative Buildings. Integrating Information,Organizations and Architecture* (pp. 150-163). Heidelberg: Springer.
- Lahlou, S. (2000). Attracteurs cognitifs et travail de bureau. *Intellectica: revue de l'Association pour la Recherche Cognitive, 30*, 75-113.
- Lahlou, S. (2001). Functional aspects of social representations. In K. Deaux & G.
 Philogène (Eds.), *Representations of the social: Bridging theoretical traditions* (pp. 362 p.). Oxford, UK, Malden, Mass.: Blackwell Publishers Ltd.
- Lahlou, S. (2006). L'activité du point de vue de l'acteur et la question de l'intersubjectivité: huit années d'expériences avec des caméras miniaturisées fixées au front des acteurs (subcam). *Communications*, (80), 209 - 234.
- Lahlou, S. (2008a). Cognitive technologies, social science and the three-layered leopardskin of change. Social Science Information Sur Les Sciences Sociales, 47(3), 227-251.
- Lahlou, S. (2008b). Identity, social status, privacy and face-keeping in digital society. *Social Science Information Sur Les Sciences Sociales*, 47(3), 299-330.
- Lahlou, S. (2009). Designing user friendly augmented work environments: from meeting rooms to digital collaborative spaces. London ; New York: Springer.
- Lahlou, S. (2011a). How can we capture the subject's perspective? An evidence-based approach for the social scientist. *Social Science Information Sur Les Sciences Sociales*, *50*, 607-655.

- Lahlou, S. (2011b). Socio-cognitive issues in human-centred design for the real world. In G. Boy (Ed.), *The Handbook of Human–Machine Interaction* (pp. 165–188). Aldershot: Ashgate.
- Lahlou, S., Nosulenko, V., & Samoylenko, E. (2012). *Numeriser le travail. Theoreis, methodes es experimentations* Lavoisier, coll. EDF R&D.
- LaPiere, R. (1934). Attitudes vs. Actions. Social Forces, 13, 230-237.
- Latour, B. (2005). *Reassembling the social: an introduction to actor-network-theory*. Oxford ; New York: Oxford University Press.
- Latour, B., Woolgar, S., & Salk, J. (1986). *Laboratory life: the construction of scientific facts*. Princeton, N.J: Princeton University Press.
- Laur, D., LeBlanc, B., Stephen, T., Lane, P., & Taylor, D. (2010). PROOF OF CONCEPT STUDY Body Worn Video & In Vehicle Video. Victoria, BC, Canada: Victoria Police Department
- Lave, J. (1988). Cognition in practice: mind, mathematics and culture in everyday life. Cambridge: Cambridge University Press.
- Lave, J., & Wenger, E. (1991). *Situated learning: legitimate peripheral participation*. Cambridge: Cambridge University Press.
- Lawrence, R. G. (2000). *The politics of force: Media and the construction of police brutality*: Univ of California Press.
- Le Bellu, S. (2011). Capitalisation des savoir-faire et des gestes professionnels dans le milieu industriel: mise en place d'une aide numerique au compagnonnage metier dans le secteur de l'energie. Universite de Bordeaux.
- Le Bellu, S., Lahlou, S., & Nosulenko, V. (2010). Capter et transférer le savoir incorporé dans un geste professionnel. *Social Science Information Sur Les Sciences Sociales, 49*(2), 38.
- Leont'ev, A. N. (1977). *Probleme der Entwicklung des Psychischen* (2., rev. Aufl. ed.). Kronberg/Ts.: Athenäum.

- Leont'ev, A. (1974). The problem of activity in psychology. *Soviet Psychology*, *13*(2), 4–33.
- Leontév, A. N. c. (1979). Tätigkeit, Bewusstsein, Persönlichkeit. Berlin: Volk und Wissen.
- Leplat, J. (2000). L'analyse psychologique de l'activite en ergonomie: aperu sur son evolution, ses modeles et ses methodes: Octarès.
- Levinson, S. C. (2012). The Original Sin of Cognitive Science. *Topics in Cognitive Science*, 4(3), 396-403.
- Lewin, K. (1935). A dynamic theory of personality: selected papers. New York: McGraw-Hill.
- Lipsky, M. (2010). *Street-Level Bureaucracy: Dilemmas of the Individual in Public Services:* Russell Sage Foundation.
- Loader, I., & Mulcahy, A. n. (2003). *Policing and the condition of England: memory, politics, and culture.* Oxford: Oxford University Press.
- LUCSI. (2003). Laboratoire des Usages Cité des Sciences & de l'Industrie. CNRS Département Sciences et Technologies de l'Information et de la Communication, RTP 32 Acceptabilité, Ergonomie et Usages des TIC. Equipe Projet Multi-Laboratoires.
- Lustgarten, L. (1986). The governance of police. London: Sweet & Maxwell.
- Lyell, M. (2010). To Fight Crime and Win. Police Association News, September 2010, 8.
- Lyman, S. M., & Scott, M. B. (1989). A Sociology of the Absurd: General Hall.
- Mack, A., & Rock, I. (1998). Inattentional Blindness. Cambridge, MA: MIT Press.
- Mann, S. (1998). 'Refle ctionism' and 'diffusionism': new tactics for deconstructing the video surveillance superhighway. *Leonardo*, *31*(2), 93-102.

- Mann, S., Nolan, J., & Wellman, B. (2003). Sousveillance: Inventing and Using Wearable Computing Devices for Data Collection in Surveillance Environments. *Surveillance & Society*, 1(3), 331-355.
- Manning, P. K. (1977). *Police work: the social organization of policing*. Cambridge [Mass.]; London: MIT Press.
- Manning, P. K. (2008). The Technology of Policing: Crime Mapping, Information Technology, and the Rationality of Crime Control: New York University Press.
- Mark, G., Christensen, U., & Shafae, M. (2002). A methodology using a microcamera for studying mobile IT usage and person mobility. Paper presented at the Mobile Communications: Understanding Users, Adoption & Design workshop CHI 2002: 4.
- Martin, P., & Bateson, P. (1986). *Measuring behaviour: An introductory guide*. Cambridge: Cambridge University Press.
- Mastrofski, S. D., & Parks, R. B. (1990). Improving Observational Studies of Policing. *Criminology*, 28, 475–496.
- Mathiesen, T. (1997). The Viewer Society Michel Foucault'sPanopticon'Revisited. *Theoretical Criminology*, *1*(2), 215-234.
- Mead, G. H., Morris, C. W., & Morris, C. W. (1934). *Mind, self, and society from the standpoint of a social behaviorist*. Chicago: U. of Chicago P.
- Mendias, C., & Kehoe, E. J. (2006). Engagement of Policing Ideals and Their Relationship to the Exercise of Discretionary Powers. *Criminal Justice and Behavior*, 33(1), 70-92.
- Miller, G. (1956). The magical number seven, plus or minus two: Some limits on our capacity for processing information. *The psychological review*, *63*, 81-97.
- Ministry-of-Justice. (2012). Swift and sure justice: The Government's Plans for Reform of the Criminal Justice System.

- Mol, L., Krahmer, E., Maes, A., & Swerts, M. (2011). Seeing and Being Seen: The Effects on Gesture Production. *Journal of Computer-Mediated Communication*, 17(1), 77-100.
- Moscovici, S. (2008). Psychoanalysis: Its image and its public. Cambridge: Polity.
- Moskvitch, K. (2012). Salt Lake City police join rush to adopt headcams. *BBC NEWS Technology* Retrieved 16. 11. 2012, 2013, from http://www.bbc.co.uk/news/technology-20348725
- Muir, W. K. (1977). *Police: streetcorner politicians*. Chicago: The University of Chicago Press.
- Newburn, T. (2005). Policing: Key Readings: Willan.
- Newell, A., & Simon, H. A. (1972). *Human problem solving*. Englewood Cliffs, N.J.: Prentice-Hall.
- Nisbett, R. E., & Wilson, T. D. (1977). Telling More Than We Can Know: Verbal Reports on Mental Processes *Psychological Review*, *84*(3), 231-259.
- Nonaka, I. (1991). The Knowledge-Creating Company. Harvard Business Review, 69(6), 96-104.
- Nonaka, I. (1994). A Dynamic Theory of Organizational Knowledge Creation. *Organization Science*, 5(1), 14-37.
- Nonaka, I. o., & Takeuchi, H. (1995). *The knowledge-creating company: how Japanese companies create the dynamics of innovation*. New York ; Oxford: Oxford University Press.
- Norris, C. (2002). From personal to digital: CCTV, the Panopticon, and the technological mediation of suspicion and social control. In D. Lyon (Ed.), *Surveillance as social sorting: privacy, risk, and digital discrimination* (pp. 249-281). New York: Routledge.
- Nosulenko, V., & RABARDEL, P. (2007). Rubinstein aujourd'hui. Nouvelles figures de l'activité humaine. Paris: . Anthologie de textes choisis et édités par Valérie

Nosulenko et Pierre Rabardel. *Éditions de la Maison des sciences de l'homme*, 2007 – 2312.

- NPIA. (2011). Initial Police Learning and Developmen Programme Quick Notes (Version 1.15 ed.).
- ODS-Consulting. (2011). Flexible Research Contract: Evaluation in the Community Safety Unit - Body Worn Video Projects in Paisley and Aberdeen Self Evaluation.
- Ombredane, A., & Faverge, J.-M. (1955). *L'analyse du travail; facteur d'economie humaine et de productivite*. Paris: Presses universitaires de France.
- Omodei, M., & McLenna, J. (1994). Studying Complex Decision Making in Natural Settings: Using a Head-Mounted Video Camera to Study Competitive Orienteering. *Perceptual and Motor Skills*, 79, 1411-1425.
- Omodei, M., McLennan, J., & Wearing, A. J. (2002). Head-Mounted Video and Cued Recall: A Minimally Reactive Methodology for Understanding, Detecting and Preventing Error in the Control of Complex Systems. Paper presented at the 21st European Annual Conference of Human Decision Making and Control, Department of Computer Science, University of Glasgow, Scotland.
- Omodei, M., McLennan, J., & Wearing, A. J. (2005). How expertise is applied in realworld dynamic environments: Head-mounted video and cued recall as a methodology for studying routines of decision making. In T. Betsch & S. Haberstroh (Eds.), *The routines of decision making* (pp. 271-288). Mahwah, US, NJ: Lawrence Erlbaum Associates Publishers.
- Omodei, M., Wearing, A. J., & McLennan, J. (1997). Head-mounted video recording:
 A methodology for studying naturalistic decision making. In R. Flin, M. Strub,
 E. Salas & L. Martin (Eds.), *Flin R, Strub M, Salas E, Martin L* (pp. 137–146).
 Ashgate: Aldershot.
- Perrenoud, P. (1994). Competences, habitus et savoirs professionnels. [doi: 10.1080/0261976940170108]. European Journal of Teacher Education, 17(1-2), 45-48.

Polanyi, M. (1967). The tacit dimension: London: Routledge & Kegan Paul.

- Police-Roll-of-Honour-Trust. (2013). Annual Roll. from http://www.policememorial.org.uk/index.php?page=annual-roll-of-honour
- Pratkanis, A. R., & Turner, M. E. (1994). Of what value is a job attitude? A sociocognitive analysis. *Human Relations*, 47, 1545 - 1576.
- Punch, M. (1983). Officers and men: Occupational culture, inter-rank antagonism, and the investigation of corruption. *Control in the police organization*, 227-250.
- Quinton, P. (2011). The formation of suspicions: police stop and search practices in England and Wales. *Policing and society*, *21*(4), 357-368.
- Rabardel, P., & Beguin, P. (2000). Concevoir pour les activités instrumentées. *Revue d'Intelligence Artificielle*, 14, 35-54.
- Reiner, R. (2010). The Politics of the Police: Oxford University Press.
- Reiner, R. (2013). Who governs? Democracy, plutocracy, science and prophecy in policing. *Criminology and Criminal Justice*, *13*(2), 161-180.
- Reiner, R., & Newburn, T. (2008). Police research. In R. King & E. Wincup (Eds.), *Doing Research on Crime and Justice*: OUP Oxford.
- Reiss Jr, A. J. (1968). Stuff and nonsense about social surveys and observation. *Institutions and the Person*, 351-367.
- Riksheim, E. C., & Chermak, S. M. (1993). Causes of Police Behavior Revisited. Journal of Criminal Justice, 21(4), 353-382.
- Robinson, A. L. (2000). The effect of a domestic violence policy change on police officers' schemata. [Article; Proceedings Paper]. Criminal Justice and Behavior, 27(5), 600-624.
- Robinson, D. F. (2012). Bad Footage: Surveillance Laws, Police Misconduct, and the Internet. *Georgetown Law Journal, 100*(4), 1399-1435.

Rubinstein, J. (1980). *City police*: Macmillan.

- Rydberg, J., & Terrill, W. (2010). The Effect of Higher Education on Police Behavior. *Police Quarterly, 13*(1), 92-120.
- Sacks, H. (1972). Notes on Police Assessment of Moral Character. In D. N. Sudnow (Ed.), *Studies in Social Interaction* (pp. 280–293). New York, NY: Free Press.
- Sacks, H., Scheglof, E. A., & Jefferson, G. (1974). A Simplest Systematics for the Organization of Turn-Taking for Conversation. *Language*, *50*(4), 696-735.
- Schafer, J. A., & Mastrofski, S. D. (2005). Police leniency in traffic enforcement encounters: Exploratory findings from observations and interviews. [doi: 10.1016/j.jcrimjus.2005.02.003]. *Journal of Criminal Justice*, 33(3), 225-238.
- Schegloff, E. A. (1968). Sequencing in Conversational Openings. American Anthropologist, 70(6), 1075-1095.
- Schegloff, E. A. (1992). In Another Context. In A. Duranti & C. Goodwin (Eds.), *Rethinking context: language as an interactive phenomenon*. Cambridge: Cambridge University Press.
- Schulenberg, J. L. (2010). Patterns in police decision-making with youth: an application of Black's theory of law. *Crime Law and Social Change*, 53(2), 109-129.
- Scribner, S. (1984). Studying working intelligence. In B. Rogoff & J. Lave (Eds.), Everyday cognition: its development in social context (pp. 9-40). Cambridge, Mass. ; London: Harvard University Press.
- Sherman, L. W., Schmidt, J. D., & Rogan, D. P. (1992). *Policing domestic violence: Experiments and dilemmas*: Free Press.
- Sillett, T. (2010). Examining the Benefits of Body Worn Video Technology within the Criminal Justice Sector. Unpublished Management Report, University of East London London

- Simon, H. A. (1990). Invariants of human behavior. *Annual review of psychology*, 41(1), 1-20.
- Simons, D. J., & Chabris, C. F. (1999). Gorillas in our midst: sustained inattentional blindness for dynamic events. *Perception*, *28*(9), 1059 1074
- Skolnick, J. H. (1966). Justice without trial: law enforcement in democratic society. New York ; London: Wiley.
- Sluzki, C. E., & Veron, E. (1977). The Double Bind as Universal Pathogenic Situation. In P. Watzlawick & J. H. Weakland (Eds.), *The Interactional View*. New York: WW Norton.
- Smith, D. J. (1983). *Police and people in London A survey of Londoners* (Vol. 1). London: Policy Studies Institute.
- Smith, E. R., & Miller, F. D. (1978). Limits on Perception of Cognitive Processes: A Replay to Nisbett and Wilson. *Psychological Review*, 85(4), 355-362.
- Spender, J. C. (1996). Organizational knowledge, learning and memory: Three concepts in search of a theory. *Journal of Organizational Change Management*, 9(1), 63-&.
- Suchman, L. A. (1983). Office procedure as practical action: models of work and system design. ACM Transactions on Information Systems (TOIS), 1(4), 320-328.
- Suchman, L. A. (1987). *Plans and situated actions: the problem of human-machine communication*: Cambridge University Press.
- Sun, I. Y., Payne, B. K., & Wu, Y. (2008). The impact of situational factors, officer characteristics, and neighborhood context on police behavior: A multilevel analysis. *Journal of Criminal Justice*, 36(1), 22-32.
- Sunshine, J., & Tyler, T. (2003). The Role of Procedural Justice and Legitimacy in Shaping Public Support for the Policing. *Law and Society Review*, 37(3), 555-684.

- Sutherland, E. H. (1947). *Principles of criminology* (4 ed.). Philadelphia: J.B. Lippincott.
- Terrill, W., & Paoline Iii, E. A. (2007). Nonarrest decision making in police-citizen encounters. *Police Quarterly*, *10*(3), 308-331.
- Theureau, J. (1992). Le cours d'action: analyse sémiologique. [The course-of-action: semiological analysis]. In P. Lang (Ed.), *Essai d'anthropologie cognitive située [Essay on situated cognitive anthropology]*. Berne.
- Theureau, J. (2003). Course-of-action analysis and course-of-action-centered design.In: Handbook of cognitive task design. In E. Hollnagel (Ed.), (pp. 55-81).Mahwah, New Jersey: Lawrence Erlbaum Associates.
- Thompson, J. B. (2005). The New Visibility. Theory, Culture & Society, 22(6), 31-51.
- Tsoukas, H., & Vladimirou, E. (2001). What is organizational knowledge? *Journal of Management Studies*, 38(7), 973-993.
- Tulving, E. (2002). Episodic memory: from mint to brain. *Anual review of psychology*, 53, 25.
- Tversky, A., & Kahneman, D. (1981). The framing of decisions and the psychology of choice. *Science*, *211*(4481), 453-458.
- Tyler, T. (1990). Why People Obey the Law. New Haven: Yale University Press.
- Tyler, T. R., & Huo, Y. J. (2002). *Trust in the law: encouraging public cooperation* with the police and courts. New York: Russell Sage Foundation.
- Unsworth, C. A. (2001). Case Report: Using a head-mounted video camera to study clinical reasoning. *American Journal of Occupational Therapy*, 55(582–588).
- Van Maanen, J. (1972). *Observations on the Making of Policemen*: Massachusetts Institute of Technology.
- Varano, S. P., Schafer, J. A., Cancino, J. M., & Swatt, M. L. (2009). Constructing crime: Neighborhood characteristics and police recording behavior. *Journal of Criminal Justice*, 37(6), 553-563.

- Vermersch, P. (1994). L'entretien d'explicitation en formation initiale et en formation continue. Paris: ESF.
- Vermesch, P. (1990). Questionner l'action: l'entretien d'exolication. *Psychologie Francaise*, 35(3), 227-235.
- Virilio, P. (2005). Desert Screen: War at the Speed of Light: Bloomsbury.
- von Krogh, G. (1998). Care in knowledge creation. *California Management Review*, 40(3), 133.
- von Uexküll, J. (1956). Streifzüge durch die umwelten von tieren und menschen bedeutungslehre. Hamburg: Rowohlt Verlag.
- Vygotsky, L. S. (1978). *Mind in society: the development of higher psychological processes*. London: Harvard University Press.
- Waddington, P. A. J. (1994). *Liberty and order: public order policing in a capital city*. London: UCL Press.
- Waddington, P. A. J. (1999). Discretion, 'Respectability' and Institutional Police Racism. *Sociological Research Online*, 4(1).
- Waddington, P. A. J. (1999). *Policing citizens: authority and rights*. London: UCL Press.
- Walker, A., Flatley, J., Kershaw, C., & Moon, D. (2009). Crime in England and Wales 2008/09 - Volume 1 Findings from the British Crime Survey and police recorded crime Lonond Home Office.
- Walker, N. (1996). Defining the Core Police Tasks: The Negelect of the Symbolic Dimensio. *Policing and Society*, 6, 53-71.
- Walther, J. B., Slovacek, C. L., & Tidwell, L. C. (2001). Is a picture worth a thousand words? Photographic images in long-term and short-term computer-mediated communication. *Communication Research*, 28(1), 105-134.

Weber, M. (1965). Politics as a vocation. Philadelphia: Fortress Pr.

- Wenger, E. (1998). *Communities of practice: learning, meaning, and identity*. Cambridge: Cambridge University Press.
- Wenger, E. (2000). Communities of practice and social learning systems. *Organization*, 7(2), 225-246.
- Wenger, E. C., & Snyder, W. M. (2000). Communities of practice: The organizational frontier. *Harvard Business Review*, 78(1), 139-+.
- Wertsch, J. V. (1985). *Vygotsky and the social formation of mind*. Cambridge, MA: Harvard University Press.
- Westley, W. A. (1970). Violence and the police: a sociological study of law, custom and morality. Cambridge [Mass.]; London: M.I.T. Press.
- Westrum, R. (1991). *Technologies & society: the shaping of people and things*. Belmont, Calif: Wadsworth Pub. Co.
- Whyte, W. F. (1993). *Street Corner Society: The Social Structure of an Italian Slum*: Chicago University Press.
- Wigley, S., & Fontenot, M. (2010). Crisis managers losing control of the message: A pilot study of the Virginia Tech shooting. *Public Relations Review*, 36(2), 187-189.
- Wilson, M. (2002). Six views of embodied cognition. *Psychonomic bulletin & review*, 9(4), 625-636.
- Wolverhampton-University. (2009, Friday 8 May 2009). Video research to reveal public perceptions of police. Retrieved 27. April, 2010, from http://www.wlv.ac.uk/Default.aspx?page=19732
- Woods, D. K., & Dempster, P. G. (2011). Tales From the Bleeding Edge: The Qualitative Analysis of Complex Video Data Using Transana (Vol. 12).
- Worden, R. E. (1989). Situational and Attitudinal Explanations of Polic Behaviour a Theroretical Reappraisal and Emerical Assement. Law & Society Review, 23(4), 667-711.

- Worden, R. E., & Pollitz, A. A. (1984). Police Arrests in Domestic Disturbances A Further Look. Law & Society Review, 18(1), 105-119.
- Worden, R. E., & Shepard, R. L. (1996). Demeanor, crime, and police behavior: A reexamination of the police services study data. [Article; Proceedings Paper]. *Criminology*, 34(1), 83-105.
- Wortley, R. K. (2003). Measuring police attitudes toward discretion. *Criminal Justice and Behavior*, *30*(5), 538-558.
- Wundt, W. M. (1904). Principles of Physiological Psychology. London: Allen.
- Zouinar, M., Relieu, M., Salembier, P., & Calvet, G. (2004). Observation et Capture de Données sur l'Interaction Multimodale en Mobilité Actes des Premières Journées Francophones. Paper presented at the Mobilité et Ubiquité 2004, Nice/Sophia-Antipolis: ACM.

Appendix I. Details of Key BWV Devices Used



SPECIFICATION DETAILS FOR THE NEW VV3000



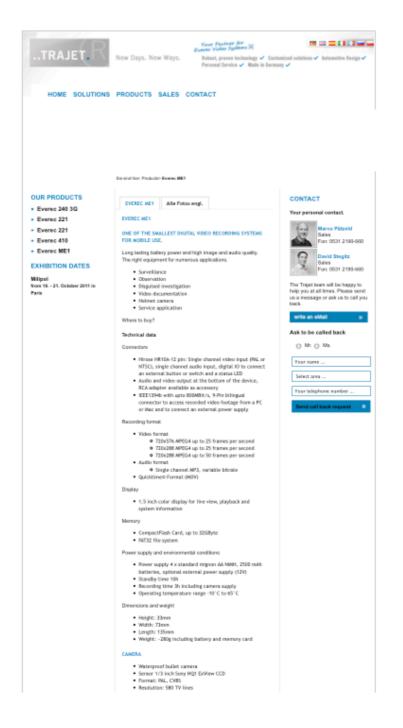
263

VIDEO VEST – VV3000

ltem	Specification for PDVR					
1	25 fps/PAL, 30fps/NTSC					
2	Single SD storage card up to 4GB					
3	1 mini USB 2.0					
4	Working Temp -10~+70 degrees C					
5	DC Jack for Adaptor Power Input (5V)					
6	Li-Polymer Battery: 4000 mAh					
7	Camera Power source on board					
8	VGA 640x480 Resolution					
9	MPEG-4 compression					
10	3.5" TFT LCD					
	LCD display resolution: 320x240					
12	Screen saver					
13	Real time video (preview), playback					
14	Rewind / pause / slow advance and slow rewind during playback					
	Weight under 300 gms					
16	Date/time stamp on video					
17	PDVR unique Mac ID stamp for all footage recorded					
18	No Format, No Delete, No Overwrite (functions removed as standard)					
19	Shock and waterproof 6G & IP65					
20	FAT 32 format					
21	Visible recording indicator - LED					
22	Positive click Button/Switch to start start/stop recording					
23	Two steps process to turn off PDVR					
	Large Buttons for easy use					
25	Low Battery and Storage full Alarm notice Beep sound; default value:15%					
26	File segmentation during recording for added resilience					
27	Screw fittings to secure all leads (8 pins & 3 pins waterproof connectors)					
28	Pre/Post Alarm					
29	Case size : 82mm x 131mm					
30	PDVR Logo changeable					



Everec ME1

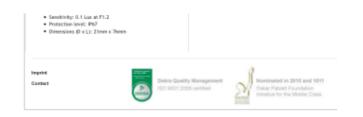


1 von 2

30.11.11 15:56

Everec ME1

http://www.everec.com/en/products/everec-me1.html



2 von 2

30.11.11 15:56



VEALMET











CARMACAM RS2

Simple to operate, simple to wear and simple to manage: CARMACAM RS2 is the product of a vast amount of customer feedback and Reveal Media's unique experience with body-worn video.

Small and lightweight, the all in one CARMACAM RS2 features a unique camera articulation mechanism, single button operation and automated management (via optional CARMA software).

FEATURES

Articulated camera One button operation Lightweight Public facing screen Rechargeable battery KlickFast Compatible Docking station (option) Fully automated upload Leather case

BENEFITS

All in one unit | Easy wearing with no wires Easy camera pointing Reduced training/workload Reduced stress on wearer Increased overt benefits Maximum flexibility Integrates with clothing **Reduces** clutter Minimised management Added protection Solid state Impact resistant

Technical Specs

• 2.2 Hours recording with internal battery.

· Over seven hours recording with optional external battery

- 640 x 480 Pixels
- 8GB SD Card compatible
- · High sensitivity 120 degrees field of view camera.
- USB 2
- MPEG-4 File Format
- 5V DC Working voltage



REVEALMEDIA Contact: Reveal Media. 0208 892 4947 www.revealmedia.com

Appendix II. Reports LSE Working Group on Body-Worn Video

This appendix has been removed.

Appendix III. Topic Guide – Interview

Topic Guide



THE LONDON SCHOOL OF ECONOMICS AND POLITICAL SCIENCE

1.			Introducing and explaining								
	а		Give a rough outline of the research								
		i.	Try to identify best practices from experienced officers. How incidents are made sense of and handled – activity. Also, I am interested in interactions between police and public and the impact of the BWVES.								
	b.		Explain setting								
		We are going to review the video material you provided me with. That process in itself is going to be filmed in order to allow me to go back to the particular episodes, sequences and incidents you point out									
		ii.	I might also take some notes								
	с		Consent form								
		i.	Allows me to use the material for research and possibly internal training. If published it will be anonymous								
		1	Give time to read								
		Point out: -That the interview can be stopped at any time if the interviewee is not comfortable -That I would like to do whatever I can to make the interviewee comfortable with the situation and that therefore any questions and concerns raised are appreciated									
	We both sign copies for each of us										
4.			Validate assumptions and hypotheses								
	a.		Ask interviewee not to talk with colleagues about it in order not to bias them.								
	b.		The British police have a very good image								
		i.	Could it be that in your interactions with the public you do something that is not done by other police forces that helped to build this reputation? If so, is there something here in the material where you think you are using that skill?								
		ii.	If there is something like that happening in your future operations or you have some other thoughts about it please come back to me and let me know.								
2.			Video-based interview								
	a.		Prior to starting the tape								
		i.	 General intent of the exercise. We are looking at the tape to: Understand what goals you had What the environment brought you in terms of opportunities and occasions to act, as well as constraints 								
	 Do you remember what is on the tape? Why did you turn the camera on in this case? What were you doing generally? What was the setting? 										

1

			 What may and (an analy)? 	
			 What was your goal (or goals)? How much of routine/ operation is what you are doing (how often 	
			 How much of routine/ operation is what you are doing (now often and frequent?) 	
			What evaluation criteria do you have for these goals?	_
		iv	External/Institutional ones. Are there certain criteria your	
		•	performance is measured that played in here?	
			 Internal / Personal ones. Are you having certain personal standards 	
			of how you go about your work?	
		v.	I will rephrase replies in order to ensure that I have a correct understanding	
		۷.	of the situation	
	b.		First complete run-through of the video	
		i.	Make a note for the recorder when exactly the tape is started	
		ii.	 Please can you describe me what you are doing and what you are thinking when the tape runs? Prompters when necessary: So what is happening here? What where your goals at this moment? How did you feel in this situation? Uncomfortable, angry satisfied etc.? What other things are you aware of in this moment (colleagues, devices, other subjects etc.) Are you thinking anything at this moment? 	
			 This is impressive, how did you do this? How did you pick this up? Are you aware that you are doing this? How did you learn it? 	
	a.		Return to particular episodes of the video	
		i,	Validating my interpretation of activities • Am I right to assume that here you do such and such?	
3.			After the review of the interview	
	a.		Retrospective questions about the tape	
		i.	Anything important we did not talk about?	
		ii.	Are there things that you would still like to point out?	
		iii	If you had to relive the scene would you do anything different? If so what?	
			Would you record it again?	
		iv	Is there anything in here that you feel could be useful for less experienced colleagues about how to proceed in this kind of situation?	
	b.		Questions about the device and its impact	
		i.	What do you think about the device?	
		ii.	How could it be made better?	
		iii	How do you feel does the public approach you generally?	
		iv	Does the camera make a difference/ affect behaviour? Your own That of the public If the device widely second and used by the form? Why (Why par?)	
-		V.	Is the device widely accepted and used by the force? Why/ Why not?	
5.			After interview	
	a.		Ask if they would be available for a short presentation of the results to validate my findings.	

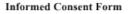
Global Organising theme theme		Basic Theme	Representative quote or explicit description of basic theme
		Individual vs. group of MOP	Groups are more difficult to control
		Ratio officers: MOP	If there are too few officers you have to operate differently
	Units of	Intoxication	If you deal with somebody that is drunk it brings all sorts of trouble
40M r	interaction Interactional component of incidents	Gender	I have to be very careful not to be left alone with a female suspect (male officer)
tting with		Regular customer	Some people know the drill and you have to consider that
ident interac		Age/ respectability	She is an elderly lady that up till know only spoke to the police to report a crime
Constructing the incident interacting with MOP		Perceived compliance of MOP to attempts of informal policing	He is immediately admitting to what he has done and apologising
Constru		Perceived control of the situation	I could not actually stop them from running because he is a lot fitter then me
		Perceived pressure to act	There are all these people around us know so I am aware that we need to look in control
		'Troublemaker' vs. 'helpful' MOP	
		Officer's notions of 'the right thing to do'	

Appendix IV. Coding Frame

Global theme	Organising theme	Basic Theme	Representative quote or explicit description of basic theme
	Formal procedures/ law	Having, lacking or constructing legal grounds Enacting formal procedures	The description is vague enough to I could search pretty much everybody I have to say these things first
ains		Potential for complaints of officer misconduct	I just want to document that I did everything right because complaints happen a lot and then my job is on the line We are very close to a large
Officer's Constrains	Health and safety	Availability of back up 'Calm' of MOP	police station He has calmed down now but I still keep an eye open
		Perceived treats of the environment	We are in the kitchen and there are lots of sharp objects
	Time pressures and affordances of space	Hindering or conducive affordances of the environment Time pressure vs. need to wait	There are so many streets levelling from this place so it's difficult to hold them together We cannot do anything before we van is not here

Global Organising theme theme		Basic Theme	Representative quote or explicit description of basic theme
		Information available before arriving at the incident.	When I heard the address I knew
	Information about	Information provided by databases etc.	He has a criminal record
	(interpretation of) incidents	Information derived from context of incident	It is 11pm and there a lots of clubs here
	ory mendents	Information derived from interaction with MOP	
Navigating an incident		Coherence and trustworthiness of information	I don't believe him and when I asked him to repeat his DOB he did not know
lavigating		Actionable information	That is an accusation so we have grounds to arrest
		Awareness of alternative ways to proceed	I could wait and call for dogs to search the car
	Sequential	Timing and sequencing acts of policing	I wait till I tell him that he is going to be arrested
	unfolding of incidents	Knock on effect of earlier acts of policing	I asked the car to stop here but it is creates all sorts of problems with the traffic
		Temporal fluctuations of types of policed incidents	

Appendix V. Informed Consent Form





Thank you for participating in my PhD research. Please read the following information and feel free to ask questions. Your participation is entirely voluntary.

The aim of the study is to learn about professional police practice and to analyze the local culture of interaction between the Metropolitan Police and the public. Particularly interesting for me is the impact of the BWV on policing. Participation in this study consists of commenting on BWV tapes. The video recordings will be selected in accordance with you. We will focus on situation in which you use experience and discretion to make context dependent decisions. Also, of interest are recordings that document the effect of the BWV device itself on policing practice. These can be both positive (e.g. de-escalation or increased willingness to cooperate) and negative (e.g. privacy concerns or people losing face) effects. The interview will be videotaped and transcribed. Should you want to discontinue your engagement with the research, you can do so at any time during or after the data collection exercise and all your data will then be erased from the research sample. None of the information will identify you, or anybody, by name. If any of the results of this research are to published or presented (e.g. at a scientific meeting), your identity will not be disclosed, and the material presented will be submitted beforehand to you for approval. A copy of the final report will be given to you on request.

The interview will provide you with an opportunity to share your professional experience and voice your opinion about the BWV. Further, you will be providing me with valuable information for my research.

Please feel free to direct any queries regarding the research to me at any time during or after the project.

By signing this document, you are consenting to be part of this research under the conditions outlined above. Further, you confirm that you understand that you may withdraw from this study at any time. A copy of this consent form will be given to you.

Thank you for your time and participation.

Signature of Participant

Johannes Rieken

Printed Name

Date

I may wish to present some of the recorded material for demonstration or training purposes. Please sign below if you are willing to allow me to do so with your recorded data.

Signature of Participant

Johannes Rieken PhD Candidate London School of Economics and Political Science Mobile: 0740 7327 710 E-mail: J.C.Rieken@lse.ac.uk

Appendix VI.	Table of SEBE Data
--------------	---------------------------

ID ²⁶	Time	Date at	BWV/	Length	Type of situation/ incident
	begin.	begin. of	SEBE ²⁷	rec.	
	rec.	rec.		Min : Sec	
		DD.MM.Y			
		Y			
01AB1	08:56	22.02.10	BWV	12:58	Arrest
02AS1		30.06.11	SEBE	58:11	
03AB2	01:32	23.10.10	BWV	5:44	Talk to victim of break-in
04AS2		30.06.11	SEBE	24:27	
05BB1	18:21	16.02.10	BWV	09:05	Drunk (duty of care)
06BS1		30.06.11	SEBE	28:17	
07BB2	0:57	20.12.09	BWV	39:59	Domestic
08BS2		30.06.11	SEBE	35:17	
09CB1	15:03	16.11.09	BWV	6:52	Shoplifting
10CS1		07.2011	SEBE	40:54	
11CB2	19:34	16.05.09	BWV	09:16	Breach of bail
12CS2		07.2011	SEBE	32:10	
13DB1	21:05	13:02:10	BWV	7:07	Public Order offence
14DS1		07.2011	SEBE	35:17	
15DB2	16:28	01.02.10	BWV	44:48	Investigation of Credit card fraud
16DS2		07.2011	SEBE	43:20	
17EB1	12:11	26.08.09	BWV	14:15	Stop and account
18ES1		07.2011	SEBE	59:36	
19EB2	19:39	28.05.09	BWV	7:13	Stop and Search
20ES2		07.2011	SEBE	40:02	
21FB1	17:41	14.11.10	BWV	29:01	Domestic
22FS1		07.2011	SEBE	1:26:26	
23FB1	02:51	08.08.10	BWV	12:41	Drunk (duty of care)
24GS1		07.2011	SEBE	43:02	
25GB2	01:26	03.07.10	BWV	5:42	Domestic
26GS2		07.2011	SEBE	37:58	
27HB1	03:20	03.05.09	BWV	27:30	Arrest
28HS1		07.2011	SEBE	1:05:02	
29HB2	22:12	06.02.10	BWV	5:55	Public Order offence

²⁶ This ID is used to link to video material in the text. The ID begins with a running two-digit number. The first letter of the ID number indicate the initial of the recordings officer's pseudonym More details about officer can be found in the next Appendix ('list of interviewed officers'). The third letter indicates if it is BWV footage (B) or debriefing footage (S). The number indicates if it is the first, second or another consecutive incident the officer was interviewed about/ provided.

²⁷ The order in this column indicates how BWV and SEBE recordings are nested. If an SEBE recoding is listed directly below a BWV recoding it signifies that that the SEBE recoding is the debrief of the BWV.

30HS2		07.2011	SEBE	22:40	
31IB1	01:42	14.10.09	BWV	40:38	Domestic
32IS1		07.2011	SEBE	1:47:31	
33JB1	23:51	07.02.10	BWV	20:07	Domestic
34JS1		07.2011	SEBE	1:15:02	
35KB1	09:30	18.06.09	BWV	46:19	Stop and account
36KS1		08.07.09	SEBE	43:38	
37LB1			BWV		ad hoc interview not filmed
38LS1		28.10.10	SEBE		
39MB1	9:52	10.05.08	BWV	13:32	Demonstration (Scientology)
40MS1		21.07.11	SEBE	58:28	
41MB2	11:00	01.04.09	BWV	6:49	Demonstration (G20 Protests)
42MS2		21.07.11	SEBE	27:01	
43NB1	14:14	19.06.09	BWV	34:43	Public Order offence (Skateboarding)
44NS1		27.07.11	SEBE	36:48	
45OB1	23:54	20.08.10	BWV	11:02	Public Order offence (urinating)
46OS1		17.02.11	SEBE	21:35	
47OB2	20:38	08.04.10	BWV	13:48	Stop and Search
48OS2		17.02.11	SEBE	1:36:35	
49PB1	10:14	23.06.09	BWV	48:23	Traffic operation
50PS1		27.07.11	SEBE	1:05:32	
51QB1	11:51	22.08.12	BWV	01:04	Stop and Search
52QS1		05.04.13	SEBE	33:04	
53RB1	01:35	14.09.12	BWV	21:24	Stop and Search
54RS1		05.04.13	SEBE	1:19:35	
55RB2	15:14	21.09.12	BWV	4:57	Stop and Search
56R6S2		05.04.13	SEBE	57:50	

The categorisation of incidents in this table is somewhat arbitrary. Many of the incidents would fit in several categories also the categories cannot be organised along a single dimension (outcome, responsive/ proactive policing etc.). Rather these labels are chosen to reflect the most salient aspect in the debriefing interview that officers focused on when discussing the recorded incidents.

Appendix VII. List of Officers

Nr.	Gender	Rank	Police	Pseudonym
			Force	
1	Male	РС	Met	Albert
2	Male	РС	Met	Bobby
3	Male	PSCO	Met	Charlie
4	Male	PSCO	Met	Dan
5	Male	РС	Met	Ebert
6	Female	РС	Met	Frances
7	Male	РС	Met	Gordon
8	Female	РС	Met	Helen
9	Male	РС	Met	Ian
10	Male	РС	Met	Jack
11	Male	Sgt	CLP	Konrad
12	Male	РС	Surrey	Lee
13	Male	РС	CLP	Martin
14	Male	Sgt	CLP	Neil
15	Female	Sgt	Met	Olivia
16	Male	РС	CLP	Patrick
17	Male	РС	TVP	Quinn
18	Male	РС	TVP	Roger

Appendix VIII. Excerpt IPLDP Quick Notes on stop and search