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'Backroom boys': occupational dynamics in crime scene examination[1]

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Abstract

Despite a sustained preoccupation with crime scene investigation in policing and instructional literatures, government reviews and media accounts, the crime scene examiner has received scant sociological attention. Focusing on scientific support personnel in an English police force, this article analyses how embedded actors who routinely facilitate the provision of crime scene examination reflect on their role and position in the investigative process. The analysis draws on data collected in a small number of semi-structured interviews with stakeholders at different levels of seniority, in order to map an understanding of the inter and intra-professional interactions, exchanges, dependencies and negotiations employed by those working at the coalface of investigative practice. Hoping to illuminate some of the sense-making practices behind the enactment of forensic activities, the discussion examines the articulation of professional identities and the conclusion reflects more broadly on the processes of professionalisation and discourses of professionalism that accompany standardised forensic accomplishments.

Keywords: crime scene examination, police, volume crime management, forensic support, DNA, profession, professionalism

Introduction

Crime Scene Examiners (CSEs)[2] have become familiar to the wider public through television crime shows such as *CSI: Crime Scene Investigation,* whose continuing success instantiates how criminal justice has been the most common and enduring theme of popular entertainment since the 1970s (Kaminer 1995, Surette 2007). The series and its many spin-offs reflect a long-standing contemporary preoccupation with criminal investigation (Innes 1999, Reiner 1997), a field where techniques such as DNA profiling have been extensively depicted as key to crime solving and infallible in character[3] (Cole and Lynch 2006, Lynch et al. 2008, Kruse 2010, Manning 2008, Williams 2008). Less attention however, has been paid to those who employ such techniques in their day-to-day work, the CSEs themselves. Not only is forensic investigation markedly different from its

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[2] A varied occupational nomenclature exists including Crime Scene Investigator (CSI) and Scene of Crime Officer (SOCO). The article uses CSE and SOCO interchangeably as the terms preferred by the research participants in this study.

[3] CSI-type TV dramas generate misconceptions about forensic tools and law enforcement (Brewer and Ley 2010, Kruse 2010, Schweitzer and Saks 2007), most notably, the 'CSI effect' which reflects the epistemic authority attributed to DNA as 'truth' in courtroom and outside of it (Cole and Dioso-Villa 2008, Ley et al. 2012, Prainsack and Kitzberger 2009).

counterpart media representations which both sensationalise it (Allen 2007, Cavender and Deutsch 2007, Huey 2010) and conflate a complex structure of expertise and accountability, but the professional standing of those that are relied upon to collect trace materials for intelligence or prosecution purposes is, unsurprisingly, more complex than fictional portrayals suggest.

Although government documents have emphasised the CSE's scope in the investigative process in England and Wales (Bramble 2009, McCulloch and Tilley 2000, Tilley and Ford 1996, Touche Ross 1987) and social scientists have analysed the Home Office recommendations on the incorporation of forensic science into policing as part of broader political and institutional discourses (Fraser 2000, Lawless 2011, McCartney 2006, Tilley and Townsley 2009, Williams 2008, Williams and Johnson 2008), empirical studies of CSEs' work and occupational dynamics are largely absent from sociological literature. The present article seeks to address this gap by examining how embedded actors who routinely facilitate the provision of crime scene examination interpret their role and reflect on their position in the investigative process. It is hoped that the analysis will help illuminate the enactment of forensic activities and offer a more textured understanding of an 'otherwise dimly lit socio-technical landscape' (Williams and Weetman 2012:4).

Based on an exploratory study on the development and implementation of rapid DNA technologies in policing, the argument outlines how forensic provision across the 43 police forces of England and Wales has been devised in policy and conceptualised in research, in order to contextualise better the inherent tensions in the CSE's gradual coming into professional prominence. In an attempt to inform and update extant debates, it then draws on data collected in thirteen qualitative interviews with stakeholders at different levels of seniority, and in particular eight accounts produced by forensic support personnel working in a south of England police force, to provide an understanding of the professional (self) perceptions and individual sense-making practices (Weick 1995), understood here as the inter and intra-professional interactions, dependencies and negotiations employed by those working at the coalface of investigative practice. The discussion analyses the articulation of the CSE's role and the structural contingencies within which this process occurs, while the conclusion reflects more broadly on the CSE's professionalisation and the discourses of professionalism governing standardised forensic accomplishments (Williams 2008).

Analysing forensic provision

Writing on scientific support in policing across the 43 police forces of England and Wales centres mainly on the development, implementation and governance of forensic science capabilities. Matters of organisational infrastructure, performance, efficiency and effectiveness dominate government-based commissioned reports and recommendations concerning the provision[4], training and practice of CSEs and are reflected to different extents in social science research, human resources literature and instruction manuals.

The CSE's occupational niche has been articulated in the last few decades with the integration of forensic support taking shape within a broader process of scientification of police work (Ericson and Shearing 1986) and rationalisation of scientific provision (Tilley and Townsley 2009, Williams and

[4] Estimated at 'less than 2% of the total police labour force' (Williams 2008: 785).

Johnson 2008). Historically, fingerprint identification and crime scene examination had been carried out by detective officers. By the late 1960s the Home Office recommended the facilitation of investigative support through officers specialised in fingerprints, forensics and photographic work (Green 2007). The *Review of Scientific Support for the Police* (Touche Ross 1987) examined the subsequent changes which encompassed fingerprint bureaux, crime scene departments and externally procured forensic services. Given the growing emphasis on the cost-effectiveness of scientific provision, the *Review* recommended that police forces continued the civilianisation of their CSEs (found to be cheaper than sworn police officers) and the development and implementation of a hierarchical infrastructure of oversight, where scientific support managers (SSMs) or management teams supervised CSEs' work as part of in-house scientific support units (SSUs) affiliated to each force.

In an effort to fine-tune the SSUs' performance to meet policing needs, the Home Office commissioned several studies between the mid-1990s and early 2000s, which analysed different aspects of forensic support (ACPO/FSS 1996, McCulloch 1996, Tilley and Ford 1996, McCulloch and Tilley 2000, HMIC 2000, 2002). Tilley and Ford's report (1996) for instance, addressed several issues noted by the 1987 *Review,* including the need for better organisation and management of SSUs in the prevention and detection of crime. Its ensuing recommendations highlighted the 'low level of awareness among police officers of forensic science provision and techniques, poor communication and the need to assess the effectiveness of forensic science' (Green 2007: 341), especially in terms of turning identifications into timely detentions.

Performance monitoring and the compilation of comparable data sets have been pursued ever since with varying degrees of success. This notably applies to volume crime[5] where forensic case data remain poorly integrated in crime analysis and the investigative process (Green 2007, Ribaux et al 2010, Williams and Johnson 2008). Despite sustained efforts to improve performance, making the most of forensic science here 'has proven remarkably tricky' and 'variation in levels of provision and inconsistency in achievement continue to be found suggesting that benefits are not being optimised' (Tilley and Townsley 2009:11). Instancing the on-going scientification of police work and rationalisation of scientific provision, the drive for forensic innovation and its implementation in policing continues, although the effectiveness of forensics in volume crime investigation remains insufficiently explored.

The intensification of state commitment to forensic science and its provision in policing crystallised the place of forensic expertise and institutionally validated the CSE's role. It has been prominently illustrated by the development of DNA profiling through the DNA Expansion Programme and the National DNA Database, the central role occupied (until its dissolution in 2012) by the Forensic Science Service as the main service provider for England and Wales, and the Forensics21 programme championed by the National Policing Improvement Agency (NPIA, now also dissolved). Correspondingly, the parameters for a standardised vocabulary of forensic activity, associated sets of measurable variables and scientific guidelines for crime investigations were established (Williams 2008).

[5] Defined as 'any crime which through its sheer volume has a significant impact on the community and the ability of the local police to tackle it. Volume crime often includes priority crimes such as street robbery, burglary and vehicle-related criminality, but can also apply to criminal damage or assault' (NPIA 2009: 8).

The occupational crystallisation of in-house forensic support in official documents emphasises timeliness, productivity and effectiveness as standards by which CSEs are valued and assessed (Ludwig et al. 2012). This preoccupation with standardised, quantifiable expectations of performance is also reflected in human resources literature. Not only are accountability and performance indicators regarded as key features of professionalism (Evetts 2013), but also the CSE's professionalisation is linked to certain identifiable skills (Kelty 2011, Kelty et al. 2011, Robinson and Tilley 2009)[6].

Similarly, the expert literature on becoming a successful CSE, confines the CSEs' professionalism to an extensive set of performance indicators and set targets that, arguably, instantiate such professionalism as a disciplinary mechanism (Fournier 1999). Forensic experts see CSEs as communicators, observers and information gatherers and describe them as 'the eyes and ears of the scientist who cannot attend the scene' (Millen 2000:125). CSEs have an 'investigative mind and a broad knowledge of forensic science', provide the 'glue between investigation and science' (idem), recover and record forensic intelligence and advise on contamination issues, being thus confined to the wider rationale of identification/elimination of suspects and reprisal of offenders and embedded in a strict hierarchy of expertise.

While the perspectives presented above illustrate organisational expectations, they largely overlook embedded understandings of forensic provision as routinely experienced and negotiated. Situated analyses on the integration of forensic support in policing highlight continuing incongruities in the alignment of CSEs' work with that of other police personnel (Williams 2008). Unlike major crime where this integration is complex, context specific and largely atypical, volume crime management is standardised, with maximum managerial control exercised and performance strictly monitored. At volume crime level, forensic support integration can be either structural - i.e. subordinate to police expertise - with CSE providing specific technical knowledge to the investigation along established authority lines - or procedural. Where forces follow a procedural model of integration, CSEs are regarded as reflexive practitioners, experts and equal collaborators and their abilities recognised as part of a co-ordinated investigative approach (Williams 2008, Tilley and Townsley 2009). Similar distinctions between procedural versus discretionary modes (Burrows et al. 2005), or process versus expert integration (Fraser 2000) reflect this dichotomic interpretation of forensic support personnel. This interpretation extends beyond in-house forensic support: external forensic experts may also be simultaneously understood by different stakeholders as both equal and independent collaborators and technical extensions to investigations (Lawless 2011). Although the procedural or expert integration model has been encouraged in policy (ACPO/FSS 1996 and Fraser 2000), both HMIC (2000) and Williams (2004) showed that its practical adoption has been rather patchy (Bradbury and Feist 2005).

Notwithstanding, social science commentators have acknowledged the rise of the CSEs as a professionalised and civilianised police provision (Williams 2008) and highlighted changes in scientific support from an 'artisan' phase to that of 'functional' and then 'integrated professionalism'

[6] Identified as: accountability, commitment, self-maintenance, personal conduct in line with the values of the unit or the department, open communication with colleagues, innovative work practice, and responsiveness to change (Kelty et al. 2011).

(Fraser 2000). Using primarily the testimonies of a group of CSEs and their peers in the SSU of an English force, the following analysis seeks to substantiate these claims and address how CSEs reflect on their own professionalisation and role in the investigative process, in order to inform discussions on forensic support provision and illuminate some of the tensions at its core.

The Study

The present findings belong to an exploratory study on the development and implementation of rapid DNA technologies in policing that sought to offer a contextual understanding of forensic support in crime investigation. Data collection took place over six months during 2011, through a combination of methods: documentary analysis of official sources, ethnographic observation of custody suites, participation in internal workshops and thirteen in-depth, semi-structured, face-to-face interviews with stakeholders at different levels of seniority, including National Policing Improvement Agency (NPIA) and Association of Chief Police Officers (ACPO) representatives, Home Office and the DNA Ethics Committee members, and forensic support personnel in a south of England police force.

The interviews lasted between one and two hours and centred on the participants' views on forensic technologies in policing, the potential challenges such technologies raise and the various strategies used to address them. These issues were examined in relation to participants' knowledge and past and current duties, employment background and training received. Participants were encouraged to explore in detail what they identify as relevant to their job role and overall expertise in relation to crime detection and management. Descriptions of work routines and interactions were elicited to document each individual's sense-making practices (Weick 1995) and provide an informed overview of organisational and occupational dynamics. In addition, mapping career trajectories and tracing professional histories were used to assemble a situated, contextualised understanding of professional values in crime scene examination. Interviewees were selected through a snowball method and usually interviewed at their workplace. Following the British Sociological Association's statement of ethical practice, anonymity was guaranteed to all interviewees.

The discussion below concentrates on the eight testimonies of forensic investigators: four CSEs, one forensic and investigation quality supervisor (FIQS), one crime scene manager (CSM), one crime scene coordinator and manager (CSC/CSM) and the SSU manager (SSUM). The participants belong to one of the largest English police forces, covering an area of around 4,000 square miles. Employing over 3500 constables, 500 law enforcement officers and 300 police community support officers, this semi-rural constabulary oversees a population of approximately 1.5 million and is split into three main geographical areas. An additional 1,500 staff work in a wide range of roles as CSEs, call handlers, analysts, police enquiry officers and admin and technical support. Participants were all senior white males, five civilians and three sworn police officers with either a fingerprint or a scene of crime background. Each had at least fifteen years of experience. Their mean age was 43 (range 34–62 years). At the time of the interview they all worked at the same location, split over two sites.

Furthermore, the analysis draws on field-notes, observations and the narratives provided by the other five interviewees (2 NPIA, 2 ACPO and 1 National DNA Ethics Committee members) in order to

corroborate accounts and strengthen the robustness of findings through the triangulation of data. Interviews were taped, transcribed and interpreted using a grounded-theory approach (Glaser and Strauss 1967, Strauss 1987). Transcripts were open-coded, examined systematically and sequentially and categories were developed through an analytic process of comparison to highlight similarities and differences between accounts. Field-notes and observations were used to refine the generation of categories and the subsequent analysis. The following quotes illustrate the main saturated themes. Given the size and heterogeneity of the group interviewed and the variety of forensic support arrangements across the 43 police forces, generalisations from the findings would be unfeasible; instead, the aim here is to present some of the discursive repertoires accompanying processes of professionalisation in crime scene examination and the dependencies and negotiations that occur in the undertaking of forensic support.

a. Core work

CSEs engage in the 'immediate and on-going decision making about what particular observational, documentary and collection procedures should be undertaken on each of the variety of locations, persons and objects that comprise the scenic particulars of the crime in question' (Williams 2008: 763). For those interviewed, anticipation and projection are characteristics of the job, shaped by detention and potential prosecution as essential (and measurable) organisational outputs:

> Your job…is to foresee and project yourself down the line as to what evidence is likely to be required. It's being able to relay quick information back to the officers to give them a second bite of the cherry or a bit of the cherry on reasonable interpretation of the scene, but also be aware that you would have to, if it's a denial all the way, to actually be able to produce that evidence. (FP8, CSE).

This ability to anticipate the next stages of the investigation emphasises the CSEs' role beyond that of simple evidence collectors and illustrates a greater job specialisation, which, in the quote below, indicates the speed of the CSE's expanding job remit:

> (It was) decided that that role of the SOCO was to expand, so I did facial identification… I trained as a fire investigator, done Crime Scene Manager training, examination of mobile phones, I was the local X-ray for suspect packages and devices to determine whether they were feasible or not. I've (had) probably more jobs than I can actually think of with so many little things that you've been trained in doing. (FP7, CSE)

Faced with this increased flexibility, the CSEs interviewed regard core work [(i.e. 'predominantly examining scenes…recovering evidence in a right and proper way… interpreting the scene and taking away the necessary evidence' (FP5, CSE) and ensuring 'that you don't take on so much that you water down your skills' (FP6, CSE)] as key to maintaining one's professional identity, a point to which we will return shortly.

Core work is circumscribed by organisational performance parameters and principles of accountability (Manning 2008) and subject to a complex material and cognitive set of considerations, described variously by commentators as tacit knowledge (Reiner 1992), proto-scientific conjectures or effective technical procedures (Williams 2008). Participants attribute skill to years of knowledge and routine, an acquired sense of the anomalous and spotting the out-of-ordinary. They bring together 'troublesome knowledge' (Nic Daéid 2010: 75), i.e. knowledge from a range of contexts with distinct claims to epistemic authority. Their views highlight the interplay of different sources in

crime scene knowledge production and the wider investigation and emphasise the role of experience in navigating the terrain. They also illustrate how CSEs rely more on a trained eye and interaction that involves communications with victims and witnesses, rather than a dependence on technologically mediated tools (Williams 2008). Here, such dependence is related to an overreliance on DNA trace and regarded as limiting expertise:

> I regularly hear 'Sarg, if you've got no forensics, I haven't got a job.' And I say…'Hang on, get off your backside, start knocking on the doors, start doing the donkey work that they had to do years ago before the gift of DNA. (FP9 CSC/CSM)

The exceptional epistemic status accorded to DNA (Cole 2001, Lynch et al. 2008, Lynch 2013) and its perceived hierarchical value are instanced above by the participant's interpretation of the novice's impasse as an inability to collect DNA trace. While the advent of DNA fingerprinting was said to revolutionise forensics, give credibility to its practices and elevate it to a scientific status, those interviewed were equally sceptical about the hype it generated and the use of DNA trace, especially in view of its cost and the potential of human error. The CSEs interviewed entered the field as fingerprint examiners and despite the expanding job remit fingerprinting had for them a higher symbolic status than other, more recently acquired tasks:

> (It's) always borne me in good stead, because there is a certain art to it, whilst some of the other functions we carry out in the forensic side, are just functions: it's either a blood stain or potential of a stain there and you take it, or it's a mechanical fit or a tool mark, but it's there to be seen. Whilst fingerprints can be a bit of a black art. (FP6, CSE)

Furthermore, the application of DNA in policing as experienced in the field and understood through the normative discourses and organisational guidelines accompanying its introduction and use, was seen as a mechanical rather than an interpretative task. Unlike fingerprinting, interviewees neither felt they held the means to its analysis, nor that they had ownership of the result. This concern is also expressed in a top-down view of the process:

> A lot of the supply chain in the forensic process, is 'chuck it over the fence' so CSIs pick it up, drop it into scientific support, who drop it into suppliers….No one owns the outcome…You just have to give them ownership and they feel, 'ah, now I've got a reason to get out of bed in the morning, I can really influence whether this actually solves…'What you find is where forces have done that, they've got a much better, higher, detection rate from forensics, because they're much more careful about the quality of the sample they recover and… look after it better, plus they chase it through the system and they own it and they get the outcome and they give it back, and say, 'look, look, I've got a name for you, Sir'. Otherwise, they'll just go off to the next crime scene. 'I've done that job and I've moved on, I don't need to know whether they ever got the DNA out of that.' Very rarely would they get any feedback. (FP1, NPIA representative)

Reflecting what Williams and Weetman call 'the political and emotional patina associated with the effectiveness of genetic forensics' (2012:4), the NPIA's account links the CSE's sense of ownership to DNA trace and embeds it in organisational parameters, higher detection results and hitting targets. For the CSEs interviewed ownership of the result (DNA or otherwise) was equally important, albeit for different reasons:

> There's nothing better in the world than being responsible for identifying and catching that person. It's probably one of the greatest kicks, 'cause you see the completion of the task… You see it…from Day 1 when nobody had a clue right through to seeing that person being convicted... You're responsible for every step: you write the statement, you take the notes,

> you may go and give evidence against the person, you see them convicted and the resolution of that brings some sort of closure to that person's suffering. (FP8, CSE)

The different meanings attributed to 'owning the outcome' demonstrate the ways in which organisational discourse is used as an interpretative resource for an individually negotiated, embedded frame of social action (Innes 2002). These distinct interpretations contextualise the principles guiding everyday practice and indicate how professional identities are constantly enforced and maintained through such discourses, which are also instrumental to shaping the CSEs' perceptions of their role. When talking about 'seeing the job through' a vivid sense of place in a hierarchy of authority is present. The CSEs describe themselves as 'foot-soldiers' and 'backroom boys' who 'make the ammunition' but 'do not fire it':

> It's only the media that puts us up front with *CSI* and all that rubbish. That isn't the role most of us play, we're quite happy being sat in the back and let somebody else take the glory. That's the nature of the beast. (FP5, CSE)

Like criminal justice professionals (Hucklesby 2011, McClellan and Gustafson 2012) participants display a clear sense of mission and a strong set of professional values, expressed in a consummate attention to detail and 'getting the job done' to the best of one's abilities, although both present accounts and evidence elsewhere (Williams 2008) suggest that their efforts are rarely formally recognised like those of the investigative police officers.

b. Practitioner knowledge

Ribaux et al. note that unlike serious crime which mobilises exhaustively and systematically police resources 'intervention in the context of high volume crime (e.g. break and enter) shows a greater variety of, often tacit, strategies and practices' (2010: 67). These are locally defined and depend on organisational decisions regarding scene attendance, crime scene processing and the use of information gathered (idem). If the CSE's professional jurisdiction refers to the selection, collection and documentation of crime scene items according to a set of scientific guidelines, in volume crime technical competency is further circumscribed by cost-effectiveness and risk management (as the capacity to select the most relevant trace), which are instrumental to all CSEs' decisions and actions:

> At the end of the day it's all right taking tool marks, but if you cannot identify a tool what's the point of recovering tool marks? What's the point of taking a paint sample if you've got no offender with a paint tool? So you've got to risk manage it, you've got to weight it up in terms of 'I'm rich in forensic evidence here, do I need it all'? This is to do with volume crime I'm talking about, not major. Major crime, murder, you take everything...glass samples… the fibre, because you don't know where it might lead to. I'm dealing with the volume crime stuff, the burglary, the car crime, that's where you've got to be cost-effective. (FP6, CSE)

Participants distinguish between formal training and accreditation and the knowledgeable, expert, evidential use of trace in the management of volume crime. Professionalism is seen as dealing effectively with volume crime in terms of adjusting to practical considerations while following a cost-saving rationale, overcoming the overreliance on DNA trace, as discussed above, and the 'tick-box mentality produced by the training school' (FP10, CSM):

> (I)f you did everything as you were instructed to do as the Durham way[7] or the Met way, you would find that you probably grind to a halt after about first week, because you would take everything and everything would have to be processed and recorded and therefore you

[7] Reference to Harperley Hall near Durham, the national training centre for CSEs.

> become ineffective, because you're taking 90% rubbish that is not necessary. You know what you want: how much do I need to recover a) to identify a person, b) to identify that there's more than one person c) can that evidence stand up in court and therefore be judged? Those are some of the key elements there. It may be that it leads you to intelligence-based information or it may be for the prosecution. (FP5, CSE)

Senior CSEs routinely show junior colleagues and those recently transferred to the force 'how to dodge the perfect to achieve a result' (FP8, CSE). A similar explicative process is undertaken to teach police officers 'the limits of what can be achieved' (idem). The scepticism of police officers towards forensic science, especially when solving less serious crime has been noted (Manning 2008; Williams 2004, 2008). In contrast here, participants acknowledge that officers have always sought their experienced advice and even more so lately:

> (I)t's turned out that because of the role and the budgetary, they have to get things through you, to come and seek advice…We encourage the officers to fill out the laboratory forms and work through the forms with them so they can appreciate what questions they're asking the laboratories and why they need to word it in a certain way. What is it you're trying to achieve? What questions do you want answered and why? And they don't often know what the question is that they should be asking, so you're guiding them through the process… (FP8, CSE)

Adjusting officers' expectations is replicated throughout the hierarchy of scientific support. Concentrating on what forensic science 'can and cannot do' (FP7, CSE), explicative work within the SSU and from CSEs and CSMs to officers is on-going. Presently, this is epitomised by the forensic and investigation quality supervisor (FIQS), a police officer whose role is to look at volume crime investigation 'from cradle to grave', examine 'the forensic hits that come in, the proactive and covert side of it' and 'turn that initial bit from the scenes-of-crime world into a sanction detection and any supplementary detections they can get from it' (FP4, FIQS). Converting forensic intelligence into investigative outcomes, the FIQS provides the blueprint for the translation of expertise between groups:

> (I) get the link between police and scenes of crime, so you've got intelligence come in from officers on the street and from CID saying, 'well, we think so-an-so committed a crime' and the stuff from scenes of crime officers. I've been to the scene, you obviously haven't and you need to know a, b and c. When I first started, not only were [officers] not speaking to the SOCOs, but they weren't even getting their paperwork prior to interview…I know [officers] don't go to the scene.

The role illustrates local 'knowledge work' and the interactional expertise (Collins and Evans 2013) needed to facilitate the co-ordination of different sides of the investigation and implement cost-saving strategies. Bridging the cultural gaps between scientific support, crime scene examination, police and the Crown Prosecution Service, it practically anchors and symbolically highlights the CSEs' expertise in a wider operational hierarchy. By explicating contingencies and ensuring the synchronisation of activities, it also carries the recognition of discontinuities in the communication between different groups and provides the platform for their resolution.

The FIQS's work validates the context in which some of the tensions between the largely civilianised scientific support workforce and sworn officers occur. Such tensions are also present in the ways in

which the officers interviewed reflected on the benefits and shortcomings of civilianised Scenes of Crime departments:

> If you have police officers as SOCOs, one of the advantages…is more flexibility because of the 24 hour culture of police officers. There is perhaps a better understanding of investigation…and we can order police officers to do things they don't want to do. We can't order civilian staff'. (FP9 CSC/CSM)

Notwithstanding that police culture is neither monolithic nor homogenous, sociological literature on occupations has identified distinct working attitudes of sworn police staff (Chan 1996, Manning 2008, Reiner 1992). Illustrating policing as a vocation rather than a job (Reiner, 2000), a clear sense of duty is also present here. Yet, the officers interviewed also highlight the shortcomings of having sworn CSEs: a dispirited officer could request a move away from their crime scene examination work. While the training investment may not be entirely lost (as the officer may always return), given the CSE's reliance on tacit knowledge and experience, their accumulative expertise could be jeopardised. Professionalism is thus equalled to a civilianised crime scene support and recognised as having 'committed people who learn, specialise and hone their skills' (FP10, SSUM).

However, a civilianised forensic support department can easily veer towards a skilled practitioner approach to crime investigation, rather than the officially endorsed tactical and managerial direction, present at CSM level and favoured by senior staff:

> (H)aving been on courses with (other) crime scene managers, there are some that are clearly stuck in the practitioner world and don't think strategic and don't think tactical. (FP10, CSM)

Here the distinction between the civilianised practitioners and police strategists is drawn along the analytic versus the operational (speed of process) line: while attention to detail is a necessary pre-requisite, a view of the wider investigative process, held by sworn officers is key to a successful investigation. As all but 8 forces in England and Wales have civilianised crime scene departments the need for tactics is presented as paramount to making the most of the civilian practitioners' expertise and channelling team efforts. Yet, with CSE training seen as more intense and specialised than that for CSMs, the CSE's position is held in high regard by senior management and acknowledged as complementary, rather than subordinate to that of senior investigating officers:

> I'd say we were on a par, but I would have thought, as fully qualified SOCOs, they can always fall back on the skills. It's a trade-off, because a lot of these people have not been through a system like we have, that teaches you to deal with people management. So, you know, you've got some skills that they haven't and they've got some skills we haven't. (FP9 CSC/CSM)

In the quote above, the tensions between a civilianised and a sworn workforce are played at the level of depth versus breadth of expertise, with both types of experience seen as equally valuable.

Incomplete professional projects?

The employment of forensic science in investigative work is firmly circumscribed by its usefulness to police operations and the material and human provisions in place to facilitate such an employment. This article aimed to inform extant debates on the integration of forensic support in policing through an empirical analysis of the ways in which a small number of senior practitioners belonging to an understudied occupational group central to crime scene examination reflected on their work, status and position. Its remit was confined to illuminating professional (self) understandings and sense-making practices. An on-going accomplishment, sense-making referred here to the interpretative

process through which individuals order their environment by according meanings to their professional experiences and connecting duties to work routines (Weick 1995). The findings presented above are indicative of participants' sense of what crime scene examination entails, their central role in the overall investigation process, and place within it as technicians, facilitators, practitioners, and (less formally acknowledged) collaborators. Common tropes in their discursive repertoires sustaining forensic accomplishments concern conceptualisations of core work, ownership of outcomes, understandings of skill and application of knowledge in the identification of trace, and negotiation and exchange of expertise. There are obvious limitations to the present findings in terms of the size of the group interviewed, the specificities of the police force and the management of the SSU to which the participants belong.

Despite a strong Anglo-American tradition which theorised professions as distinct from occupations, the distinction between the two has become one of degree rather than kind (Evetts 2013), with concepts such as professionalisation, de-professionalisation and professionalism providing different levels for the analysis of organisational change and work identities. The concept of professionalisation illuminates the CSE's trajectory. With monopoly over duties as key to professional recognition (Abbott 1988, Freidson 2006), the CSEs' jurisdiction appears firmly secured as they provide a unique service to police forces and are central to crime detection, the identification of suspects and the production of evidence. The CSEs' technical and tacit knowledge and increasingly diverse skill-set provides specialist expertise. Their professional consolidation at the level of training has been distinctly articulated: expert accreditation is a standard requirement and anecdotal evidence suggests that higher education qualifications are now essential pre-requisites for recruiting in-house forensic support[8]. Credentialism (Collins 1979) helped CSEs achieve professional demarcation and occupational closure (Witz 1990, Ackroyd 1996).

However, although the rationalisation of forensic science provision has offered the possibility of an ascendant professional trajectory for the CSE, this has largely been professionalisation from above, through forces external to this occupational group (McClelland 1990), and similar to that undertaken by other public service occupations, lacking professional autonomy and control of the work. An enforced discourse of professionalism has been 'used to promote and facilitate occupational change (rationalization) and as a disciplinary mechanism of autonomous subjects exercising appropriate conduct' (Evetts 2013: 9). Its impact is illustrated in the explicit subordination of skills captured in participants' views of themselves as 'backroom boys', and facilitators of police work, rather than active collaborators. Furthermore, the CSE's organisational professionalism is fuelled by a 'forensic imaginary' (Williams 2010), represented by promissory discourses of forensic genetic applications and instantiated in official documents, guidelines and training and accreditation provisions. This imaginary has helped articulate the CSEs' jurisdiction, sustained their professionalisation, but has also been instrumental in restricting their professional autonomy; a point evidenced in the CSEs' views on the ownership of the investigative outcome and their role in the process. Whilst DNA fingerprinting has validated forensics science 'by framing its conclusions in terms of probabilities, contra fingerprinting, which frames its arguments in terms of uniqueness and absolute certainty' (Cole 2001: 290), it also created an apparent overreliance on DNA trace and the potential distancing from what participants identify as core work.

[8] Participants had mixed views on the practical value of some of the courses offering forensic expertise.

A discourse of occupational professionalism, built on collegial authority and the interaction between different groups (Evetts 2013) is manifest in the exchanges between the civilian CSEs and sworn police officers who are part of the SSU's structures of authority. Similar to other public service groups and in contrast with traditional definitions of professional expertise (Abbott 1988, Freidson 2006), an official, certified type of expertise (Le Bianic 2011) is attributed to the CSEs by their sworn peers and endorsed through their practitioner knowledge and technical and tacit expertise. Equally, the CSEs' professional projects are embedded in a strong work ethic, framed by an emphasis on core work. Although accreditation is perceived to promote professionalism by fostering 'an acceptance of professional and ethical principles in the performance of responsibilities' (Carter and Sapp 1994: 196), and more generally, education is central to most accounts of professionalisation (Wilensky 1964) it is not sufficient to confer professional status. Organisational discourses of accountability, ownership and effectiveness shape the participants' distinction between formal training and the knowledgeable, expert, evidential use of trace. Their higher esteem for the latter demonstrates a contextual, finely tuned understanding of professionalism.

Finally, numerous crime investigation analysts and social science commentators have proposed different models of forensic integration in relation to volume crime investigation (Burrows et al 2005, Tilley and Townsley 2009, Williams 2004). The current findings indicate that volume crime is where most of the negotiation and deliberation between CSEs and investigative officers occurs. Rather than simply showing the application of technical expertise, the CSEs' explicative work suggests a more deliberative (rather than mechanical) engagement, which appears to lead to a more collaborative role for the CSE in the investigation of volume crime. As such, the distinction between the structural and procedural integration of forensic provision seems less clear, with participants regarded as collaborators, while largely seeing themselves as both facilitators and technicians. This finding both confirms Williams' (2004) assertion that elements of both types of integration may be experienced within the same police force and practically illustrates it, particularly in terms of the local negotiation of occupational jurisdiction and expertise.

Conclusion

The recognition of forensic science as essential in the management of serious and volume crime has brought visibility to CSEs and triggered their increased specialisation within specific parameters. Analysed by academic commentators mainly in relation to the integration of forensic science provision in policing, the CSEs' status has been shown to be fraught with discursive incongruities and practical tensions. To date little is known about how this overlooked occupational group reflect on their position and role. Reasons for this oversight may have to do with the ways in which these professionals are embedded in the police structure and therefore less visible and accessible (Reasons et al. 2010 suggest as much in relation to the scarcity of studies on homicide detectives). Moreover, extant work favours a macro-approach that informs policy analyses (Ludwig et al. 2012, Kelty 2011, Kelty et al. 2011), but largely overlooks the occupational dynamics of embedded actors.

Commentators have repeatedly noted continuing difficulties in using forensic science effectively in volume crime investigation regardless of numerous policy interventions (Tilley and Townsley 2009). Such difficulties highlight the limitations of forensics for overall crime reduction and its use as a

sliver bullet for criminal detection. They also raise questions regarding future investments in forensic innovation in the broader, more austere, climate of public expenditure on justice and home affairs in England and Wales. In this context the contribution this article seeks to make is twofold: first, to inform writing on the use of forensics in crime scene examination and to document more comprehensively the CSE's position in situ. This would help illuminate the embeddedness of some of the organisational and interactional challenges CSEs encounter in their work and allow for an in-depth examination of the sense-making practices and local solutions used to overcome such challenges. It is hoped that this analysis has highlighted the normative and ideological nature of official texts on the CSEs' organisational place and role and the discursive resources drawn upon by those interviewed to present themselves as accomplished practitioners and managers.

Secondly, given that professionalism has been recognised as 'the main way of institutionalizing expertise in industrialized countries' (Abbott, 1988: 323), the article tried to substantiate claims on professionalisation and professionalism in criminal investigation (Fraser 2003, Williams 2008) through an empirically informed discussion of occupational values and identities in the field. Albeit limited, the current analysis aimed to offer a view of professionalism as routinely navigated, enacted, experienced and contested, which may not only inform future interventions but also restore a sense of agency to the ways in which the process of forensic integration in police work is seen by those directly involved in it (Williams and Weetman 2012).

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