CHAPTER 1

INTRODUCTION

On 17 May 2012 Sam Hallam’s murder conviction was quashed by the Court of Appeal. The conviction was declared unsafe. Mr Hallam had served seven years in prison for the murder of Essayas Kassahun in London in 2005, but the evidence presented in appeal from the re-investigation showed serious flaws in the original investigation, including unreliable evidence of identification, a failure to follow all leads, and a failure to disclose all evidence. Even more concerning is the case of Carlos de Luna, a Latino man convicted of murder and put to death in Texas, USA, in 1989. On 14 May 2012 a report into the investigation was published by Columbia Law School after a six-year review. The report declared that Carlos de Luna was an innocent man, the victim of a shoddy police investigation which failed to collect forensic samples and relied almost entirely on dubious eye-witness accounts (Liebman et al. 2012). The repercussions of a poor criminal investigation can be grave indeed. It may be considered that a failed investigation is the result of laziness or incompetence on the part of investigators, and this proximal causation may often be identified as the problem. However, the process of investigation is far more complex and cannot be assessed as merely a series of common-sense actions which should adhere to an accepted procedure. Far more problematic are the intangible processes which have critical impact on the way an investigation proceeds and the judgements of the investigators.

Crime is a fluid concept which changes over time and space and is especially vulnerable to cultural and societal influence. Police discretion and discrimination have long been identified as impacting on investigative and criminal justice outcomes, and there is a general call for discretion to be limited as it disproportionately and negatively affects minority ethnic groups (Tillyer and Klahm 2011).

Every stage of an investigation is beset with intricate and multifaceted activities which will impact upon the outcomes. There are human problems not only with decision making, testimony and interrogation, for example, but also with perceptions of offences, offenders and victims. Two stark examples of the importance of this are the investigation into the murder of Stephen Lawrence, which was marred by racial discrimination (Macpherson 1999), and the investigation into the murders committed by Peter Sutcliffe, the so-called Yorkshire Ripper, which was plagued with sexual discrimination and discourses of sexual violence (Ward Jouve 1988). It is important, therefore, that we consider more than mere process and examine the cultural, institutional and societal discourses which may direct the way process is observed. In this
book we will consider the practical requirements of an investigation as well as the more complex, subtle processes which interweave with the practicalities.

**WHAT IS A CRIMINAL INVESTIGATION?**

A criminal investigation is a process organised to meet the demands of a system of justice and, often, the more serious the crime, the more complex and demanding the investigation. Criminal investigations will be conducted in every country or jurisdiction across the world in some form or another but the basic objectives are broadly similar. This book focuses on the criminal investigation as it is structured and practised in the UK, the USA, and most countries where an adversarial system of justice is in place. However, many other forms of criminal justice, such as the continental inquisitorial system, will have the same standards and procedures for evidence collection, and will adhere to the basic principles and processes described. In the UK, the Criminal Investigations and Procedures Act 1996, gives a succinct definition of criminal investigation as:

An inquiry to ascertain if an offence has been committed, to identify who is responsible, and to gather admissible evidence to be placed before a judicial authority.

There are three distinct objectives described in this definition. First, to ascertain if an offence has been committed – this will require reference to the statutes and laws in any particular jurisdiction and the defining criteria for an offence. For example, there are over 8,000 acts that are deemed to be against the criminal law in the UK (Stelfox 2009: 8). Second, to identify who committed the crime – this is the part of criminal investigation which is most often portrayed as the key task. Sometimes, however, it is the case that the offender is immediately identifiable, but his or her involvement in the crime must still be proved to the standard required. The third objective is to gather admissible evidence. It is this part of the criminal investigation that is observable in crime scene processing, for example. There must be enough evidence that has been gathered in a manner acceptable to the requirements of criminal justice to prove ‘beyond reasonable doubt’, in the UK, that the suspect committed the crime.

If asked, however, many investigators might define the process as being simply ‘a search for the truth’ and popular ideas of the purpose of investigations are similarly oriented. Indeed, one of the key assumptions in the portrayal of criminal investigation is that there is a search for the truth within the process (Newburn 2007: 3). Yet, research into police homicide investigations found that the process was less about a search for the truth than it was about the construction of a credible narrative to convince a jury to convict; a narrative that will ‘tie people, places, objects and phenomena together in a plausible chronology’ (Innes 2002: 682). This suggests that plausible stories, and durable stereotypes of offenders and motivations, may be important in deciding what the truth is. Hastie (2003) and Hastie et al. (1983) report that the ‘story
model’, or assembling evidence into a coherent narrative, is the most widely adopted approach in jury decision making, especially where strong scientific evidence is not available (cited in Devine et al. 2001: 625). So, we should not forget the social, cultural and political context in which all investigations take place, and this context also includes the priorities of the investigators. Certainly, in policing terms, the successful conclusion to an investigation will include securing a conviction, so this will be a priority, driving the way the investigation is conducted and documented. This priority is reflected in the Crown Prosecution Service (CPS) Full Code Test – a test which drives the decision whether to prosecute or not (see Chapter 12). There are two key stages: the evidential test, and the public interest test. The evidential stage specifically requires a realistic prospect of conviction.

In an adversarial system of justice, the trial is ostensibly a battle between opposing sides – the prosecution and the defence. It is a criticism of this form of justice system that the truth is less important than the story or narrative that is told of the crime by each lawyer. Rather than attempt to locate the truth, each lawyer may just attempt to undermine the veracity of the opposing team’s account, or the strength of their evidence. This practice may involve attacking victims and witnesses, and playing to juror prejudices or belief systems (Aldridge and Luchjenbroers 2008).

AIMS OF A CRIMINAL INVESTIGATION

The concept of truth in itself is contested. French philosopher, Michel Foucault (1975), questions whether objective truth actually exists, arguing that subjective positions will create multiple truths dependant on discourses in circulation at any point in time. So, from this perspective, a retrospective analysis of what happened in any criminal event will be influenced by constructions of the witnesses, victims, offenders and the criminal act. Some victims are perceived as more ‘deserving’ than others and this can impact on perceptions of the offence. For example, rape has long been held to be a difficult crime to prosecute. Research has shown that it is perceptions of the victim as more or less deserving or culpable which can have an impact on whether the jury and investigators ‘believe’ that the crime occurred, irrespective of whether it fits the formal definition of the offence (Kelly et al. 2005; Monckton-Smith 2010). Problematic also are the institutional pressures to achieve a conviction. The most plausible narrative, or a failure to search beyond what appears obvious, can have serious repercussions for alleged offenders. For example, in the case of the murder of Rachel Nickell, Colin Stagg was identified as the prime suspect and the investigating team failed to search outside this assumption, leading to him being wrongly convicted (see Case Study 9.1).

If the ultimate aim of an investigation is a successful prosecution, which could, in some cases, inhibit unravelling the truth, then it is clear to see that the process itself needs careful regulation to avoid miscarriages of justice. There is often a separation in perception of those who have their convictions quashed at appeal between those who are considered innocent and those who have been ‘let off on a technicality’
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(Walker and Starmer 1999). It is sometimes the case that a person freed by the Appeal Courts will remain the prime suspect in a case. For example, the murder of Wendy Sewell in 1973 saw the conviction of Stephen Downing. It was later declared that his conviction was not safe and he was freed after serving 27 years in prison. Despite this, he remains the prime suspect of the police, and some media reports suggest that he was released on a technicality rather than being innocent of the crime (Daily Mail 2006). It is not for Appeal Courts to consider the guilt or innocence of a defendant, merely to assess the strength of the evidence which convicted them. So it becomes increasingly clear that the concepts of guilt, innocence and truth are less important than the credibility of the narrative and the strength of the evidence available to secure a conviction.

Systems of justice have rules which should make it difficult to wrongly convict. However, Denov and Campbell (2005) report that there are varying estimates for wrongful conviction, suggesting that between 0.5 per cent and 20 per cent of convictions in the United States (equating to between 6,000 and 10,000 cases per year) could be wrongful, and around 6 per cent in the UK.

The police act as the investigators in the majority of crime that is prosecuted in adversarial systems, but with the increasing complexities of large-scale forensic and criminal investigation, and the need for more and more specific expertise, many investigative roles are undertaken by civilian employees and forensic specialists. Forensic science and specialist expertise are required to meet the very high evidential standards and expectations of modern trials. Whatever the type of infraction, dispute or criminal offence, the principles of investigation will remain the same and all that will change is the amount of resources and effort employed. Stelfox states that:

The law defines certain types of behaviour as criminal, it provides a framework of rules and regulations within which investigators must work and it determines the standard of evidence that is required before a prosecution can be brought against someone. (2009: 6)

There is a significant range to criminal offending and the contexts in which it can occur, and of necessity this will affect the specifics of any investigation. For example, identifying the (key) offender in a criminal network of organised crime will be a different process from identifying the offender in a burglary, and will require different types of evidence. There are two key strands which run alongside each other and which we will examine: first, the practicalities and processes of investigation; and second, the cultural, institutional and societal influences which interweave with those practical processes. Both are of equal importance in understanding how we practise criminal investigation. If safe convictions can be achieved merely by observing rules and protocol, one can argue that the investigation is an objective scientific process. However, as discussed, subjectivity cannot be removed from this process and a combination of objective assessment and subjective culturally situated assessments of the crime and actors are inevitable bedfellows, making the investigation potentially equally constituted of science and art.
CRIMINAL INVESTIGATION – SCIENCE OR ART?

Newburn (2007: 4) suggests that criminal investigation has historically been organised in three main ways: first, specific criminal investigation (detective) departments; second, specialist squads formed in response to particular problems, for example a robbery squad; and third, major inquiry teams set up to investigate specific crimes or events. These three organisational frameworks work independently of forensic science in the main, except for their relationship to specialist scenes of crime support. ‘Forensic’ (or ‘forensics’) is a term which relates to any scientific process or technology used in the context of the legal system, and the notion of a ‘forensic investigation’ is often differentiated from a criminal investigation. However, both are investigations for the purpose of prosecution. The rhetoric of ‘forensics’ has been dominated by natural science technologies, especially biomedical technologies, which tend to exclude what Wade refers to as ‘the evolution of detective science’ (2007: 8). Also, media portrayals of talented and intuitive detectives who have a ‘nose’ for detection, or who have some kind of psychological insight into the mind of the criminal, have made great entertainment, but have sidelined the structured and methodical nature of forensic and criminal investigations. Steeden (2010) argues that the word ‘science’ gets in the way of understanding forensics, which is an intuitive and dynamic as well as scientific process. He observes that in terms of criminal justice ‘all bets are off’ in an adversarial system anyway, and that in this context sound methodologies and good practice are as valuable as science. Terms like ‘sound methodologies’ and ‘science’ may imply that investigation can be a sterile and structured activity but this is not exclusively the case. Investigators need to draw upon their inductive as well as deductive reasoning, and the idea that experience in the field is important in turning the forensic evidence into a secure conviction is not without merit. The key difference between inductive and deductive reasoning is largely about certainty. Becker and Dutelle (2013: 23) state that deduction works on drawing conclusions based on premises which are known to be true or are certain, and induction on drawing conclusions from probabilities, which may be more about logic and experience, but both are an integral part of the scientific method. The argument that criminal investigation is more an art or craft than a science stems from the long-held tradition of detective skill being learned, almost exclusively, through practice and the wisdom of experienced investigators. It was this belief that is argued to have inhibited the development of formal detective training (Wade 2007). Experiential skill will, arguably, be more vulnerable to the influences of institutional and cultural discourses in circulation at any point in time. It may guide investigative hypotheses, ideas of the motives of the offender, the perception of the victim, and the case narrative. We should also remember that crime itself is a societal/legal construct and criminals act in multiple contexts with multifarious motivations and behaviours.

There is a strong argument that investigations must be constituted of science and art, especially if we remember that all crimes and trials occur in a social and political context. In fact, Ferris (1987) argues that the criminal investigation is more art than science and, as a discipline, it necessarily borrows from all other disciplines, including the humanities, due to its complexity.
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THE CSI EFFECT

In many contested cases it will be lay people who make decisions of innocence or guilt. In the UK this will be lay magistrates or juries and these individuals, on the whole, are not scientists or detectives. Juries may well rely on popular notions of the strength of forensic evidence and the plausibility of the narrative, and are a dynamic and unpredictable lay element in the process of justice. There is a strong popular belief that science not only has all the answers, but is almost infallible. This is, of course, incorrect. Media portrayals of forensic specialists have given unrealistic expectations of what forensic techniques can provide, but also skewed notions of the process of investigation.

It is often taken for granted that any crime can be solved, and what is often referred to as the ‘CSI effect’ has only added to this misconception. The ‘CSI effect’ can be described broadly as an unrealistic expectation of the capabilities of forensic science in the solving of serious crime. This effect is suggested to have been caused by the inaccurate depiction of forensic science in popular media. It is having a real impact in jury trials, where jurors may expect to see similar levels of forensic science evidence which is infallible (Robbers 2008).

It is true that an offender will often leave some trace of him or herself at a crime scene, but these traces may not be identifiable or collectable. Even if they are identifiable and collectable, they may not be able to place the offender at the scene at the salient time. It may also be the case that trace evidence is damaged in the process of collection, or by environmental conditions at the crime scene. The limitations of forensic evidence have been somewhat obscured by popular depictions, and it has been suggested that criminal justice professionals may be just as affected by such portrayals as the general public (Robbers 2008). This can create confusion over what different forms of evidence can actually prove or establish, what the science itself can offer, and whether every crime is solvable. It can also raise the State’s burden of proof to match unrealistic expectations (Robbers 2008). In the case of the disappearance of Madeleine McCann in 2007 in Portugal, for example, the trace evidence at the crime scene was rendered useless because a crime scene lockdown was not initiated in the crucial early stages. This case remains unsolved despite having what seems to be the world’s combined knowledge in investigation and forensic science applied to it. Forensic science cannot answer questions to a certainty or solve every case.

THE STRENGTH OF EVIDENCE

The scientific framework for obtaining evidence to support a hypothesis demands rigorous methods, but there are varying degrees of validity for different forensic techniques. For example, we can be fairly confident that fingerprint evidence is strong but this is only the case if the original print has integrity, and even this technology has been
the subject of criticism, with allegations that it lacks a sound scientific basis (Broeders 2007). Forensic science techniques are also subject to shifting standards. For example, the 16 points of comparison required in the UK for a positive identification of a fingerprint were deemed excessive and were reduced because most other countries only required 12 points of comparison (Green 2007). In contrast, polygraphy (in popular parlance, lie detection) is considered relatively unreliable, showing accuracy rates of around 85 per cent in some studies (Grubin and Madsen 2006). Such room for error, which is considerable in criminal justice terms, makes polygraph tests invalid evidence in UK courts at this time, but acceptable in other jurisdictions and contexts. Trials in mandatory polygraph testing for paroled sex offenders in the UK have been completed and the Offender Management Act 2007 allows for a polygraph condition in the licence of certain sex offenders. It is expected that the programme will be expanded. This shows that the technology has growing acceptance in criminal justice terms.

New forms of forensic knowledge, such as so-called offender profiling, are also not considered strong enough at this time for use in court to identify individual offenders, but as the practice becomes more professionalised and reliable, its more general use in the process of investigation is becoming more widespread. The strength of offender profiling as a forensic technique for identifying specific individuals was tested in the American courts in New Jersey v Fortin (2000) and rejected as invalid for that particular use (Petherick et al. 2006: 85). However, there have been a number of successes arising from geographical profiling which has been utilised to inform the parameters within which to prioritise mass screening for DNA. These technologies are evolving all the time, and as Morris notes, ‘what science – medical or other – can offer, varies over time, and so do the standards of proof expected of its deployment’ (2007: 22).

Some evidence is more useful to the process of prosecution than others. Most useful is that evidence which identifies a particular individual. Largely, this is the difference between identifying the class characteristics or individual characteristics of a forensic sample. For example, in ridgeology (fingerprint science), fingerprints are made up of ridge patterns called arches, loops or whorls. All fingerprints have these. They are a class characteristic and will only identify that something is a human fingerprint – not to whom that fingerprint belongs. It is individual characteristics that will narrow the print down to a specific individual – that is, the patterning of the loops, whorls and arches that are unique to an individual. Similarly in shoeprint evidence, there will be class characteristics to certain makes of shoe which can tell us who the manufacturer is. It is the individual differences which may have been wrought by wear and tear that will tie the shoe to a particular individual. It was also recognised in the 1950s, with the development of the science of ballistics, that no two weapons produce identical bullet markings. This discovery allowed specific weapons to be tied to specific crimes (Wade 2007). Not all evidence is of equal value despite the popular belief that ‘evidence is just that – evidence’ (Hawthorne 1999: 4). It is often in the context of a trial that forensic science evidence will have its strength, and what it can actually say about the case in hand, rigorously challenged.
PROFESSIONALISATION OF INVESTIGATIVE PRACTICE

The processes of structured investigation are similarly consistently developing and have been the subject of increasing research interest in the social and mathematical sciences (Morris 2007). It is only relatively recently that it has been acknowledged that investigation of crime is a particular practice which should be defined and structured to allow practitioners to gain expertise and accredited training (Stelfox 2009). In the UK, the Professionalising the Investigation Programme (PIP) was introduced to improve standards of investigation, with a view to achieving more convictions and a reduction in the number of failed trials. What is also crucial to PIP is that it provides measurable quality of the case files prepared by investigators. A case file will contain all the documentation pertaining to a case, and the more serious the case, the more complex the case file. The complexities in case file preparation are discussed in Chapter 12.

The work of Crime Scene Examiners (CSEs) or Scenes of Crime Officers (SOCOs) crosses traditional barriers of investigative and scientific practices. Historically, crime scene processing was done by police officers, but in the UK it was recommended in a Home Office report (Touche Ross 1987) that CSE work should be transferred to specifically trained civilian employees, freeing up trained officers to ‘convert forensic intelligence into investigative outcomes’ (Green 2007: 355). The institutional fear that forensic science is a competitor in the field of investigation, rather than an ally, was being systematically challenged. We should consider that forensics is a constantly developing, multidimensional field combining social science, natural science, intuition, deduction, induction, structured process, protocols, laws and procedure, and is equally constituted of science, art and investigation.

It is a cornerstone of many criminal justice systems that individuals charged with a crime are innocent until proven guilty. The importance of the strength of that proof is a continuing theme throughout this text and strength of evidence also dominates any forensic investigation and prosecution. The process of investigation relies on the combining of science with professional procedure; that is to say, it involves the implementation of the scientific framework in analysis and interpretation of evidence, and professional procedure in the identification, gathering and storage of evidence to maintain its integrity for the purposes of justice. It will draw together in equal importance: social sciences such as criminology, geography, psychology, anthropology and sociology; natural sciences such as biology, chemistry and pathology; legal and judicial rules and requirements; organisational processes and procedures; and inductive and deductive reasoning. There are inevitable conflicts, and a large-scale criminal investigation is an incredibly complex, dynamic and demanding activity. The complexity of investigations reflects the diverse breadth of knowledge required to be an effective detective, and the multidisciplinary nature of investigation. Wade states that ‘the trappings of science and professional procedure dominate every step of police work’ (2007: 11) and this is never more true than when applied to investigation.

This text, though focused on the scientific method utilised in forensic analysis and the professionalisation of investigative practices, also explores the ways in which
inductive and deductive investigative skills are used alongside social and natural sciences, and the subjective nature of interpreting evidence and constructing crime narratives. All components are, in fact, integral to the investigative process, and the inductive/deductive and science/non-science dichotomies, which frame many arguments about the veracity of evidence and decision making, are not as clear-cut as is sometimes suggested.

The complexities of criminal and forensic investigation in modern times have precipitated a growing professionalisation, and in this sense all areas are increasingly demanding subject-specific expertise and specialisation. Criminal investigation is not something that is carried out by a single multi-talented individual, despite some media portrayals of detectives, police officers, criminologists, psychologists or behavioural analysts. As Wade (2007) notes, the main problems for police officers in any investigation will arise in court, and so it is with this in mind that investigators must direct their operations. They must be meticulous in their methods and processes for the adversarial system will magnify any weaknesses in the evidence or the investigation.

Research into investigative practices and skills has inevitably had an impact in the way policing and investigation is now carried out. It was arguably the Police and Criminal Evidence Act 1984 (PACE) in the UK which established hitherto unparalleled rigidity in the handling of suspects, and PACE had a real effect in the outcome of prosecutions if the regulations were not followed. In most jurisdictions now, strict rules pertaining to criminal investigation are in place and it is crucial that investigators are trained in observing those rules.

However, apart from police officers not following legal rules or guidelines closely enough, it is the procedures of the Crime Scene Examiner that will have significant power to undermine evidence. So, in parallel, there have been developments in the expertise of those who process a crime scene. It is essential that evidence is collected according to procedure or it will have its strength reduced in the context of a trial. A good example of this is the case of Barry George, who was convicted on the basis of circumstantial evidence and some very fragile forensic Gun Shot Residue (GSR) evidence, and later acquitted when that evidence was deemed unsafe (see Case Study 4.2). Of course, just because evidence is deemed unsafe, it does not mean that the perpetrator of the crime is innocent. However, the system will be unable to convict on the basis of the flawed evidence. Lord Bingham of Cornhill, in R v Pendleton (2002) 1 WLR 72, stated that in appeal cases ‘[t]he question for consideration is whether the conviction is safe and not whether the accused is guilty’. It is here that we see the importance of process and procedure in the work of the detective, the weight of which is rarely revealed in media portrayals of criminal investigations.

With the development of forensic techniques and electronic technologies, and the expectations set by media portrayals of investigations, more and more potential miscarriages of justice are being identified, and the flaws in investigations are being publicised and scrutinised. In Belgium, the investigation into the activities of Marc Dutroux rocked public faith in the Belgian police and precipitated a complete
restructuring of policing (Robbers 2008). Similarly, in the UK, high-profile miscarriages of justice, such as the investigation into the death of Stephen Lawrence (Macpherson 1999) and the Byford report into the investigation of the activities of Peter Sutcliffe, the so-called Yorkshire Ripper (Cabinet Office 1982), changed the way investigations by police were carried out. There is high-level scrutiny of criminal investigations and investigators, and the competency of police and other personnel in this respect is now more formally tested. As a response to this, it is essential that investigators are highly trained. Ultimately, they should be trained to make logical, structured and accountable decisions, in often challenging circumstances. It is against this real-world background that the actions of police officers in the initial response to a report of crime or suspected crime, and the subsequent lockdown of any suspected crime scene, should be considered.

THE CHANGING CRIMINAL JUSTICE ENVIRONMENT

With the world being a conceptually and practically smaller place than it once was, brought about by the development of faster, more efficient travel, the opening of international borders, and the relatively new environment of internet communication, crime and criminals are changing. Police investigations, now more than ever, will often rely on cross-jurisdictional and international co-operation. New crimes have emerged, along with new ways of committing old crimes, with new sophisticated criminal networks and new criminal environments (including virtual and online environments). These changes all present challenges to criminal and forensic investigations. Along with expanded and internationalised crime, there are new forms of international legislation (for example, human rights legislation) which have great impact on the way investigations are conducted. A corollary to this is the increasing profile and role of the victim of crime in the process. Additionally, with the advent of the internet there is an increased awareness among the criminal fraternity of forensic investigative techniques and forensic strategies, the nature of which may have previously been less readily accessible to the general public. Rapid developments in relation to closed circuit television (CCTV), mobile phone forensic telephony, automated number plate recognition (ANPR), and computer technology have all impacted significantly upon the changing face of investigation, and most criminal investigations will generate investigative policies at an early stage in respect of most, if not all, of these media. The collection of evidence arising from such sources requires equal integrity to the more traditional collection of biological and chemical evidence if it is not to jeopardise subsequent prosecutions. This is forensic and criminal investigation in its widest form.

ORGANISATION OF THE BOOK

This book brings together many areas of forensic and criminal investigation which must, of necessity, work together, and which are complex and multifaceted. Every
investigation will adhere to the same principles, but the amount of resources, including effort and time, that can be allocated to investigations will vary, usually in accordance with the seriousness of the crime under investigation. There are also competing outside influences that must be negotiated by the investigating team and the investigating officers. Inevitably there will be the victims and offenders, but there may also be witnesses, media involvement, political interest and extraneous personnel at the crime scene (paramedics, for example). All these groups/people will add complexity to the investigation. We have tried to organise the material in this book in a chronological order, but in reality investigations are rarely so simple as to follow a linear pattern. There are inevitably cross-overs of time, and many of the processes described or discussed will be happening simultaneously. To put the investigative process into context, we have introduced a fictional homicide that runs throughout the book and allows us to show how components of an investigation might link together. Doing so will allow the student to identify where mistakes have occurred that could undermine the prosecution of the case.

This book is structured in four key sections. The three introductory chapters place the concept of criminal investigation in an historical and modern criminal justice context, and discuss the bias in forensic narratives and case construction. This is in preparation for the more practical chapters which follow, which focus on the practice of criminal and forensic investigation. These chapters are organised around the three key strategic phases in any criminal investigation, identified by the National Centre for Policing Excellence, and which are common across most jurisdictions:

- Instigation and Initial Response
- The Investigation
- Case Management

The first phase is the initial response to a crime and the instigation of the process of forensic investigation. This section explores the initial and crucial actions of first attending officers or first responders – those police officers who are the first to arrive at a crime scene and who must identify it as such.

The second phase explores the process of gathering evidence from various sources and placing it in the context of emerging crime narratives. This section explores both social science and natural science processes and strategies, including forensic evidence.

The third phase explores the way gathered evidence is placed in a case file and the processes and scrutiny it is subjected to before eventually forming the basis for a prosecution strategy in a court.

The final chapter discusses re-investigations and reviews where investigators often cannot collect their own forensic evidence. Instead, they rely on what was done sometimes many years previously.

To aid comprehension, the text is interspersed with vignettes of real-life cases where the particular actions discussed have had impact in a strategic and judicial
sence. This could be via particular investigative decisions or via appeals against conviction or maybe high-profile miscarriages of justice. These vignettes should also prompt discussion. There is a good deal of commentary on certain aspects of investigation given by experienced investigators so that experiential and academic perspectives are both presented.

CHAPTER 1: INTRODUCTION

This chapter has placed the concept of criminal and forensic investigation in the context of the process of criminal justice and has identified investigative priorities. The advances in forensic science, the increasing complexities of domestic, European and international legislation, the expanding parameters, contexts and locations of criminal actions and the expansion of human, victim and offender rights have made the processes of criminal investigation more complex, challenging and more closely scrutinised, with the public becoming ever more engaged with the fairness of those processes. Here the inductive/deductive and science/non-science dichotomies were introduced to illustrate the complexities and contested terrain of criminal investigation.

CHAPTER 2: A BRIEF HISTORY OF CRIMINAL INVESTIGATION

This chapter gives a brief history of the role and activities of the police detective, placing the development of forensic science and detective science in context.

CHAPTER 3: CRIMINAL INVESTIGATION AND VICTIMS

This chapter looks outside the police and investigator priorities and considers the role and needs of the victim. There have been policies in recent times which purport to put the victim at the heart of criminal justice and two innovations for this are discussed: Victim Personal Statements and Restorative Justice.

STRATEGIC PHASE ONE: INSTIGATION AND INITIAL RESPONSE

CHAPTER 4: INITIAL RESPONSE AND CRIME SCENE LOCKDOWN

This section is focused on practical process and discusses the importance of the initial assessment of a potential crime scene by the First Officer Attending (FOA)/First Responder (FR). In the context of a serious crime, it is often obvious that such a crime has been committed. However, this is not always the case and it is a responsibility of the FOA/FR to establish if a crime has been committed and to implement procedures and processes at the earliest possible time. The possibilities for loss of evidence or the weakening of the strength of potential evidence are
discussed and examples of real-life cases where poor initial actions have impacted on the strength of case file evidence and, ultimately, the strength of a conviction are provided.

In our hypothetical crime (Running Homicide), the initial actions of the First Officer Attending (FOA) the scene are documented and form the first layer of crime scene activity to be discussed by students.

CHAPTER 5: CRIME SCENE EXAMINERS

This chapter too is focused on practicalities and documents the actions of Crime Scene Examiners and what happens after the initial crime scene lockdown by the FOA/FR. This is an examination of what is called ‘crime scene processing’ – those things that should be considered when attempting to preserve and protect potential evidence at a crime scene and to create a permanent record of the scene as it was found. Again, real cases where poor forensic sample collecting or cross-contamination were an issue are offered for discussion.

In our hypothetical crime, the actions of the Crime Scene Examiners create another layer of investigative activity. A picture of the crime scene and its possible evidential value is now beginning to emerge and should allow readers to begin forming their own ideas of an investigative strategy, related to their own emerging construction of a plausible crime narrative. This should also encourage possible identification of multiple crime scenes which may need processing and the mistakes made by the attending CSEs.

STRATEGIC PHASE TWO: THE INVESTIGATION

CHAPTER 6: INVESTIGATIVE STRATEGY

This chapter focuses on the strategies employed by the Senior Investigating Officer (SIO). It is here, perhaps, that the importance of narrative construction and investigator bias are realised. Here, we talk of the tasks which must be completed by the SIO in a major crime. Investigating officers at less serious crime scenes will complete similar tasks but on a smaller scale. The SIO must formulate potential crime narratives and follow all reasonable lines of enquiry. In a major crime the SIO must co-ordinate what may be a large team. They will take on an investigative and a management role, requiring various and specific skills. Although Strategic Phase One documented the processes for securing evidence, this is an ongoing and dynamic process and inevitably the different strategic phases will overlap. In this sense, this section will discuss emerging strategy in what is becoming a complex investigation. For the purposes of the text, investigative activities appear as if in a sequence, but this does not exactly represent what would happen
in reality, where multiple practitioners perform these tasks concurrently rather than sequentially.

In the context of our hypothetical crime, there is room to contemplate your own strategies and potential narratives. The evidence has been collected in processes discussed in Strategic Phase One and the crime scene has been documented. Using this information, you can critically consider the best way forward. What strategies may be employed? And what evidence should or could be collected or sought during the evolving investigation?

CHAPTER 7: FORENSIC SCIENCE SPECIALISMS: PALYNOLOGY, ENTOMOLOGY AND DNA

In this chapter certain forensic science specialisms are discussed. The chapter offers a more focused examination of specific techniques, namely palynology, entomology and DNA.

CHAPTER 8: ELECTRONIC AND PASSIVE DATA

Passive data are data collected by automated systems that are usually unrelated to any criminal investigation but that can be accessed by investigators. Data of this type would be generated by such systems as CCTV, telephone billing, global positioning systems (GPS) or credit card bills. Quite often such data may be able to place individuals in certain locations or establish certain behaviours which may be incriminating or eliminating. This chapter describes and discusses some sources of passive data and how they can be useful in elimination and implication. It discusses the need for searches not only of passive data systems but also of areas which extend beyond the parameters of identified crime scenes. This may include places such as personal computers, drains or vehicles.

In the context of our hypothetical crime, some potential sources for passive data are discussed, along with discussion prompts covering searches which may be beneficial.

CHAPTER 9: SUSPECT PRIORITISATION, BEHAVIOURAL ANALYSIS AND PROFILING

In this chapter we discuss the role of forensic psychology and criminology in reducing suspect pools and the kind of advice or help which can be given in an investigation. This is an especially high-profile forensic specialism that has captured public attention, but here we discuss the realities of the technologies. This chapter also provides the perspective of a senior investigator who has both studied and operationally used profiling in investigations in order to give an authentic example of how profiling works in reality.
CHAPTER 10: INTERVIEWING VICTIMS AND WITNESSES

In this chapter we discuss the interviewing of victims and witnesses. Witness and victim evidence is said to be the single most important form of evidence in the case file, and has more impact on investigative and prosecution outcomes than physical evidence. We discuss interview strategies and the different categories of victim and witness which impact on the way their evidence is presented.

CHAPTER 11: SUSPECT INTERVIEWS

This chapter looks at the different interview strategies employed in the UK and the USA, which are suggested to be polarised. The nine-step Reid Technique and the model for investigative interviewing are discussed. We also focus on confession evidence, which has led to many miscarriages of justice.

STRATEGIC PHASE THREE: CASE MANAGEMENT

CHAPTER 12: CASE FILES

This chapter discusses the subject of case file building, that is, putting together a file of documentation and evidence which meets procedural and legal standards and would, first, convince an objective party that there is a realistic proposition of securing a safe conviction for a specified charge and, second, be used to direct the prosecution of a suspect. There is a process of disclosure where the defence team will be given a copy of all the evidence collected in the investigation, so they will have a copy of the case file. This process can sometimes lead to plea bargaining, which is also discussed.

In the context of our hypothetical crime case, the material discussed in this section should be considered in light of how or if it impacts on the decisions made in previous sections.

CHAPTER 13: CASE REVIEWS

This chapter discusses the process of investigating a crime which is classed as ‘unsolved’. This may be because a suspect was never identified or because there was a miscarriage of justice. In many jurisdictions, case reviews are now commonplace, and may occur while an investigation is still running or open in serious cases, especially homicide. In the UK, if a suspect is not identified within a certain time period, a case review will begin. The investigation into an historical or old crime will present its own difficulties. The crime scene cannot be revisited so it is the documentation gathered in the original investigation that will be relied upon. It is in such cases that the importance of recording a crime scene exactly as it was found is realised.
Introducing forensic and criminal investigation

**Box 1.1**

**Defining an offence**

All offences have written definitions, and to secure a conviction each of the defining criteria of an offence must be proved. For example, the basic definition for the offence of theft is:

> To dishonestly appropriate property belonging to another with the intention of permanently depriving the other of it. (S1 (1) Theft Act 1968)

So each element of the offence must be proven. The property must be dishonestly taken. If there was an honest belief that the accused had a right to take it, the offence is not proven. The property must belong to another. There must be a provable intention to permanently keep the property. So if it can be established that the accused intended to give the property back, this is not a proven theft. It is the purpose of evidence to prove the offence occurred and to prove the accused is guilty of the offence. The evidence will be organised around the definition of the offence and the actions of the suspect.

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**Key Terms**

**Adversarial system:** a system where two or more parties present an argument before a neutral party, usually a judge and/or jury.

**CSE (Crime Scene Examiner) and SOCO (Scenes of Crime Officer):** those individuals who process a crime scene.

**CSI effect:** an unrealistic expectation of the capabilities of forensic science in the solving of serious crime. This effect is suggested to have been caused by the inaccurate depiction of forensic science in popular media.

**Deductive reasoning:** reasoning based on propositions known to be true or certain.

**FRA (First Officer Attending)/FR (First Responder):** those officers who are first to arrive at a suspected crime scene. They must identify it as such and begin the process of a crime scene lockdown.

**Forensic:** any technology used in the processes of the legal system.

**Inductive reasoning:** reasoning based on probabilities and related to experience and logic.

**Inquisitorial system:** a system where the court acts, in part, as the investigator and is responsible for determining the facts of the case.
Revision questions

1. What is the key difference between detective science and forensic science?
2. What is the CSI effect and how might this impact on criminal investigations?
3. Why is the notion of a ‘search for the truth’ problematic?
4. How would you characterise an adversarial system of criminal justice?
5. According to Newburn (2007), what are the three main ways in which, historically, a criminal investigation has been organised?
6. Is it the purpose of an appeal to consider the guilt or innocence of a convicted person?
7. What is PACE and what was the key change it forced upon investigators in the UK?
8. Describe the three key objectives in an investigation.