KD Watson, Medicine and Justice: Medico-Legal Practice in England and Wales, 1700-1914

Chapter 1

Introduction: The Medico-Legal Landscape

In delivering his opinion, or explaining the cause of death, the surgeon's narrative should be simple and candid; let him use as few technical terms as possible, both for the better information of the jury, and to avoid giving a lawyer an opportunity of embarrassing him.

William Dease, *Remarks on Medical Jurisprudence; Intended for the General Information of Juries and Young Surgeons* (Dublin: James Reilly, 1793), p. 22.

In a scenario replayed countless times in modern fiction, a hapless doctor sits transfixed in a courtroom witness box, pinned like a bug to a board by the questioning of a just-barely-civil defence barrister determined to undermine their credibility, weaken their evidence and ensure the client's acquittal. This, it seems, was a state of affairs not unknown to the medical profession of the late eighteenth century, as the warning issued by the Irish surgeon William Dease (c.1752–1798) attests. Though he was speaking of the practices he had witnessed at first hand in Dublin, there was little difference to the English courts of the day, as noted by the Somerset-based physician Samuel Farr (1741–1795) in his earlier textbook: "... it is to be hoped, that this little treatise will meet the attention of judges and lawyers ... and that they will be enabled to correct the errors of coroners, or ignorant surgeons, who may have been misled in the depositions they give in."1 But what do we really know about the encounters between medicine and law, doctors and lawyers, in the criminal courts of the past? How and why did medical professionals enter the courtroom; what did they do to get there and what reception did they receive? This book will situate doctors in their rightful place as contributors to the investigation of crime, as part of a criminal justice system that evolved over the course of the eighteenth and nineteenth centuries to create the regularised policing and legal structures so familiar today.

The book is conceived primarily as a contribution to the historiography of criminal justice in England and Wales. As such, it is broadly concerned with the history of the formal systems of practice directed at deterring, detecting and punishing crime.² But it engages this far-reaching field of study by focusing on the intersection of the social history of law and crime with medical history. Legal historians examine the common law and legal process, in order to understand how and why these embodiments of the state-controlled administration of justice adapt and evolve in response to internal and external stimuli.³ Crime historians adopt a complementary perspective, taking as their main focus of study the individuals who engaged with the criminal justice system and the terms on which they did so, to explain how people in the past understood crime and criminality and either engaged in criminal conduct or attempted to manage it.⁴ The present study examines the history of crime and legal process through the lens provided by one group of historical actors, medical professionals who gave evidence in criminal proceedings. They are the means of illuminating the developing methods and personnel associated with investigating and prosecuting crime in eighteenth- and nineteenth-century England and Wales, when two linchpins of modern society, centralised policing and the adversarial criminal trial, emerged and matured.⁵ It is devoted to two central questions: what did medical practitioners contribute to the investigation of serious violent crime in the period 1700 to 1914, and what impact did this have on the process of criminal justice?

Criminal justice historians — a term used here to include all scholars who study law and crime in historical context — are interested in specific groups of actors and particular practices. Thus, the scholarship of the past thirty years has shed considerable light on offenders and victims; juries; law officers such as police, magistrates, lawyers, judges and coroners; criminal trials; and punishment including execution, transportation and imprisonment. Key themes that serve to unite these broad areas of study have emerged, including the relationship between gender, law and crime, examined most often through women's experience of the criminal justice system; 6 and the changing attitudes to violence revealed through criminal justice proceedings. Probably no form of criminal behaviour has been subject to more scrutiny than homicide (a term used here to denote three species of fatal interpersonal violence, murder, manslaughter and infanticide), as historians have sought to identify the incidence and characteristics of violence in the past.7 Similarly, the history of rape is integral to understanding contemporary beliefs about sexual assault.8 The prosecution of homicide and rape, as crimes against the person, involved some estimation of physical harm done to a victim, yet medical professionals have for the most part been excluded from British criminal justice historiography. This represents a significant omission given the observation with which this chapter began. By the late eighteenth century, the medical contribution to the prosecution of serious crimes against the person had become so common as to merit both publications on the subject and Dease's note of caution to young practitioners who might be called into court: they must be wary of lawyers but considerate of jurors.9

A great deal of scholarly attention has concentrated on England in the eighteenth and nineteenth centuries, when "legal, procedural and cultural changes crystallized modern attitudes" to violence and crime, ¹⁰ stimulated the adoption of professionalised methods of policing and prosecution, ¹¹ encouraged more reliance on lawyers in criminal trials and inspired the development of evidentiary rules. ¹² Legal historian Lindsay Farmer has noted that as a result of these innovations, trials became longer and more contentious, began to rely more on expert evidence, and allowed more influence to accrue to "the personalities of the lawyers, detectives and scientific experts that came to dominate" legal proceedings. ¹³ The same might be said of the coroner's inquest, the other jurisdiction where the evidence of a medical practitioner was most likely to be required.

Historical interest in the inquest as a legal process began in the late 1950s,¹⁴ but doctors and the evidence they provided have escaped thorough scrutiny despite the fact that the inquest's primary function was the investigation of sudden death — which by definition created a decision-making process to establish cause and manner of death: natural, accident, suicide or homicide.¹⁵ Detailed research on inquisitions, the formal records of inquest findings, led to the conclusion that medical determination of cause of death, as opposed to lay assessment, was relatively under-developed in relation to Continental practices though becoming more usual by the early nineteenth century.¹⁶ A later series of important books on medico-scientific expertise considered medical evidence in both inquests and the criminal courts, but focused on public accountability and scientific objectivity rather than matters of routine practice.¹⁷ Thus, despite the pioneering work of Catherine Crawford and Jennifer Ward on the institutional development of forensic medicine,¹⁸ few academic studies have examined medical practitioners as ordinary actors in the criminal justice system.¹⁹

The fact that forensic practices are embedded in socio-legal context was highlighted by an important collection of essays, Legal Medicine in History, which emphasized the "formative influence of legal systems on medico-legal knowledge and practice" through a series of case studies.20 Crawford's seminal chapter presented a persuasive interpretation of the slow development of "medico-legal science" in early modern England as a product of the framework created by the common law tradition of jury trial and oral evidence. Unlike the procedures created by the Roman-canon legal system, there was no requirement for the testimony of experts, written or otherwise, and hence no ready-made point of entry for medical practitioners to the English courtroom. Crawford noted that medical testimony was often sought by "English coroners, magistrates and trial participants" before 1800, but dated the beginnings of legal acceptance of medical expertise to the nineteenth century, thereby explaining the late development of forensic medicine as a learned science.21 In Crawford's interpretation, the law led and medico-legal practice followed. Although subsequent studies by Julia Rudolph and Carol Loar have dispelled the assumption that early modern death investigations placed little reliance on medical evidence,22 there has, to date, been no study of medico-legal practice across precisely the period that historians of crime have identified as crucial to the development of English criminal procedure, the eighteenth and nineteenth centuries.

Crawford's research firmly linked legal history to the social history of medicine, a third area of study directly relevant to this book. Engaged in what is now a flourishing historical sub-discipline, social historians of medicine examine all aspects of health, illness and medical practice from a range of perspectives including the political, socio-economic and cultural; important areas of focus include health, disease, institutions, patients and the development of the various professions involved in medicine.23 The concept of the 'medical marketplace', used to describe the variety of medical provision available to sick people in the past, is particularly interesting, as historians have identified eighteenth-century changes brought about by a burgeoning consumer society as factors that expanded both the demand for and supply of medical services. The very diversity of the available provision suggests, however, that "historians should ... think of the markets for medical goods and services rather than a generalized image of the medical market or marketplace."24 While the medical market has been used by historians in relation to health care, the historiography of this important concept has largely overlooked a very different yet parallel market for medical services: the market created by the needs of the English legal system. The service offered was not health care but crime investigation; the consumers were not sick people but legal officials; there were no patients, only victims. This relationship evolved, like the traditional medical market, on the basis of supply and demand but, in a departure from the customary model of medical care, the 'commercializing' marketplace in which medical practitioners were located was that defined by the requirements of criminal justice administration.

It is therefore important to recognise a distinction between academic scholarship and what the average practitioner actually did. The former is best described as the body of systematic knowledge known as forensic medicine: during the course of the nineteenth century an international group of university lecturers wrote textbooks that came to define and establish the intellectual standards for this emerging medical specialism.²⁵ The terms 'legal medicine' and 'medical jurisprudence' were often used interchangeably to signify the same scholarly field: the application of medical science to legal problems. But the hands-on forensic activities that medical practitioners actually undertook are more accurately understood as 'medico-legal work', a term that embraces all possible applications of medical knowledge for legal purposes but which in criminal cases most often involved some form of

body examination, of the living or the dead or, less frequently, an assessment of mental capacity. Both terms are informed by the presumption that forensic medicine and its practical mechanisms that is, forensic practices — exemplify the use of medical evidence to establish facts in aid of legal decision-making processes.

Medico-legal work in England and Wales pre-dates the academic discipline of forensic medicine. Thus, one of the main tasks of this book will be to identify its form and scope and to show how embedded in and responsive to wider patterns in crime and criminal justice administration it was. Essentially, medico-legal work developed in tandem with and was shaped by the needs of two evolving processes: pre-trial investigative procedures dominated successively by coroners, magistrates and the police; and criminal trials in which lawyers moved from the periphery to the centre of courtroom proceedings. In bringing together for the first time four groups of specialists doctors, coroners, lawyers and police officers — this study offers a new interpretation of the processes that shaped the modern criminal justice system.

Medico-Legal History: The Story So Far

The important role played by medicine in legal settings since the medieval period has been clearly established by a range of medical and legal historians who, since the early studies of T. R. Forbes, have used inquisitions, legal manuals and criminal trial accounts to consider issues of civic concern chiefly death investigation, the most common focus of medico-legal practice. Sara Butler has demonstrated the importance of medical evidence in medieval inquests;26 a larger body of work has examined the early modern period to show that medico-legal practice, albeit sporadic, occurred in sixteenth- and seventeenth-century death investigations;27 and Orna Alyagon Darr has published a novel study of medical testimony in English witch trials.28 It is clear that the principles of forensic medicine were visible in some parts of England by the middle of the eighteenth century:29 from around 1750 uncertainties in medical testimony gave English courts a justifiable reason to acquit women accused of newborn child murder, 30 and medical witnesses on insanity began to venture into the courtroom.31 Institutional progress occurred in the first third of the nineteenth century, when forensic medicine offered medical reformers a particularly useful means by which to demonstrate the power of scientific medicine, giving the profession a more public importance and authority. The first substantial English-language textbooks were published and a periodical literature appeared, the Society of Apothecaries made training in forensic medicine a condition of medical qualification from 1 January 1831 and Guy's Hospital established a lectureship in the subject (to which the soon-to-be famed toxicologist Alfred Swaine Taylor (1806–1880) was appointed), and in 1836 the government introduced statutory fees for medical testimony at inquests.32

Poisoning and suicide became increasingly important subjects of medico-legal consideration as the incidence of both rose during the nineteenth century;³³ and so did child sexual abuse, although the medical contribution had a rather less positive impact on trial outcomes.³⁴ The mental and physical characteristics of newborn child murder, or infanticide, became one of the most frequent issues on which medical evidence was sought, but both were medically and legally contentious.³⁵ Toxicology and psychiatry emerged as key areas of potential collaboration but also of conflict between doctors and lawyers, who did not necessarily share a common conception of certainty, proof or free will.³⁶ It is perhaps unsurprising, then, that these were the areas of medical practice most closely associated

with the rise of the expert witness, a figure that appeared in the late eighteenth century as a uniquely qualified individual permitted to give evidence about both fact and opinion on the basis of professional experience. This figure, linked closely to the notion of 'expertise' and seen as a potentially partisan advocate within the adversarial criminal trial structure rather than an impartial purveyor of accurate information,³⁷ is typically distinguished from more usual medical witnesses in the historiography. The expert witness relies on specialised knowledge developed during the course of a professional career and can thus be called to give evidence about matters that they have not witnessed directly, in order to offer opinions about causation. Other medical witnesses, by contrast, testify only to their direct observations and the interpretations they draw from them.³⁸

The most dramatic evidence of the status and knowledge claims of forensic medicine and medical witnesses was apparent in criminal trials. Anne Crowther and Brenda White noted that in England and Scotland "a small group with special experience, usually drawn from the hospitals, universities, or police surgeons, provided an unofficial cadre of forensic experts. By the end of the century, although general practitioners still performed autopsies, particularly in remote areas, most courts preferred a specialist".³⁹ So, after 1900 a smaller group of 'experts' concerned themselves with the criminal aspects of forensic medicine.⁴⁰ At the same time, government support turned to the application of science (physics, chemistry and biology) to crime detection as part of a central reorganisation of policing.⁴¹ The emerging historiographical consensus was thus that forensic medicine in England advanced from informal early modern origins through a period of expansion and consolidation in the early nineteenth century, only to become the poor relation of forensic science a century later.

New scholarship has begun to explore scientific policing and the twentieth-century separation of forensic science from forensic medicine,42 but there has as yet been no systematic investigation of the way in which forensic medicine came to rely on a small group of 'experts' (who have themselves featured disproportionately in the historiography) or, indeed, of the individuals engaged in routine forensic practice in any period. The medico-legal history of the British Isles remains inadequate and under-developed because, quite apart from the intellectual focus on toxicology, insanity and infanticide to the near exclusion of more typical cases (most victims of homicide were adults who died from head injuries or stabbing),43 the geographical spotlight has tended to rest upon London and trials held at its central criminal court, the Old Bailey. This (one suspects) is at least partly because of the attention that crime historians level on London, as a result of its vast archival riches. Less astonishing perhaps is the fact that forensic practice is almost completely unexplored in the historiography of crime in Wales which, though less extensive than that of England or Scotland, is beginning to grow.44 Social historians of medicine, meanwhile, have largely been interested in health care in the Principality;45 legal historians in the law in Wales.46 But given that England and Wales have been united under a common administrative and legal system since the mid-sixteenth century, yet have very separate socio-cultural identities, the investigation of medico-legal practice in Wales is merited both in its own right and as a foundation for future comparative work. Furthermore, such a study opens up to exploration essential questions suggested by Peter King, who has warned against the assumption that central initiatives were simply applied nationwide in toto. Instead, he asks historians to consider the ways in which law and the practice of justice "can be explored by contrasting the central and the marginal and by analysing the relationship between them", since it is likely that in many respects "the operation of justice was remade as much from the bottom up as from the centre down".47

A new generation of historians has adopted the regional approach advocated by King: in the past decade more doctoral theses exploiting records produced outside London to examine medico-legal topics have appeared than at any previous time. Fisher's work on the office of coroner provided a truly national perspective,48 while Daniel Grey and Victoria Bates compared London with regions in the west of England in their work on infanticide and child sexual assault, respectively.49 Further afield, Elaine Farrell's study of infanticide in Ireland focused in part on medical evidence in coroners' courts;50 and forensic practices in Scotland were examined by Nicholas Duvall and Tim Siddons, who carefully acknowledged the wider institutional, investigative and geographical networks in which Scottish medico-legal work was ensconced.51 These studies have developed their arguments with a close attention to and regard for legal practices, embracing an interdisciplinary approach that draws on the sources and methods of the history of medicine, law and crime. In so doing, they have helped to bring historical forensic practices into criminal justice decision-making structures, siting medicolegal work within an integrated investigative process.52 The present study contributes to the strands of analysis developed by these scholars, and extends them. In adopting a wider regional comparison across a significantly longer period of time, this book will identify the contribution made by medical practitioners to the investigation of serious violent crime and establish its transformative impact on the process of criminal justice.

Criminal Justice: Process and Procedure

The process of organising a criminal case began when a violent crime was identified, involving the collaboration of doctors, coroners, lawyers and the police in the service of the principal branches of eighteenth- and nineteenth-century criminal justice: law enforcement and the court system. A large supporting cast of lay witnesses, magistrates, jurors and judges were also essential contributors to this system. Historians of law and crime have long been interested in the development of criminal investigation and court procedures,53 but have directed little attention to doctors even in relation to the coroner's inquest.54 Histories of the office of coroner, by contrast, tend not to examine criminal justice procedure as a fundamental attribute of the developing importance of medical knowledge at inquests.55 For this book, however, it is important to recognise the intersecting roles played by these disparate groups, as a foundation for the analysis presented in later chapters. Figure 1.1 demonstrates this relationship as a series of separate yet linked processes that proceeded in a forward direction, from pre-trial hearing by a coroner and/or magistrate to a criminal trial presided over by a judge and jury. Eyewitnesses and jurors were essential to crime investigation, prosecution and trial throughout the period, but their contribution became progressively more passive as professionals assumed a greater responsibility in the practices of criminal justice. The holders of ancient office — judges, magistrates and coroners (of whom until the nineteenth century only the judges could be defined as professionals) were joined by doctors, lawyers and finally the uniformed police, thereby establishing the modern system of criminal investigation.

<FIGURE 1.1 HERE>

The investigation of a crime was initially reactive: a criminal case began when a lay witness gave information or made a formal complaint to a coroner, magistrate (also known as a justice of the peace or JP) or parish constable. A system largely unaltered for centuries began to change rapidly in the nineteenth century when the 'new police', 56 organised at county or borough level, replaced

parish constables and in larger towns police courts staffed by stipendiary magistrates superseded amateur JPs. Although the new police were primarily a preventive force, they swiftly took on a central role in investigating serious crimes against the person: victims and witnesses turned to the police as the appropriate authority and logical first step in the process of criminal justice. However, the police shared that position with another group: it was entirely typical for members of the public to send for the police *and* a doctor following the discovery of a crime such as homicide. Early police methods in such cases perhaps differed little from those of "the more conscientious and determined of their predecessors," in that they relied largely on information gathering, circulation and storage techniques pioneered in mid-eighteenth-century London by the Bow Street magistrates.⁵⁷ However, the new police joined coroners and magistrates as an important source of demand for medico-legal knowledge, and part of what this book will do, is demonstrate how that relationship worked. To that end, Appendix 3 provides a chronological summary of the introduction of the new police in the areas relevant to the project (see Aims, Methods and Sources, below).

Coroners were under no legal imperative to seek medical evidence at inquests, although clearly some did so, before a more systematic practice began to develop in the eighteenth century under the stimulus of published manuals designed to establish clear protocols. In 1761 the senior coroner for Middlesex, lawyer Edward Umfreville (c.1702–1786), advised coroners to have a surgeon present in all cases of suspected homicide. If the parish surgeon refused to attend without payment, as had been known to happen, then the churchwardens and overseers could be directed to send a surgeon to attend the inquest, to open and inspect the body and give evidence for the crown.58 In cases of homicide, the inquest verdict recorded in an inquisition had the status of an indictment: any named individual had to stand trial. At the same time, numerous manuals devoted to the duties of JPs instructed magistrates on the different categories of homicide; but JPs were similarly under no legal obligation to obtain medical evidence, merely "the best evidence that may be had." 59 Common sense dictates that suspected murder made the need for medical evidence obvious; and the cases examined here demonstrate that it did indeed become a regular component of homicide trials early in the eighteenth century. There was no reason not to call upon a doctor's skill in a potentially capital case: coroners and magistrates had the power to compel witnesses to testify in criminal cases by entering them into recognizances, usually about £20 at mid-century but nearer £40 by 1800. If the witness failed to appear in court, the money was forfeit and few individuals could afford such a penalty. If doctors wanted to avoid getting involved in a case, therefore, they had to do so before an inquest or committal hearing commenced.

The coroner's main obligation ended with the inquest, but if there was no complainant it was his duty to prosecute the suspected party.⁶⁰ Magistrates never acted as prosecutors, but could depose additional witnesses until the court was due to convene, in an effort to strengthen a case. Although the evidence taken at inquest or before a magistrate in the same case was normally the same, there was a crucial distinction: inquests inquired into the facts of a death and therefore heard evidence for and against a suspect, but committal hearings inquired only into the evidence needed to prove the felony.⁶¹ Information flowed informally between the two, however, in the form of the eyewitnesses, doctors and constables. Following the introduction of the new police, the senior investigating officer generally appeared at both proceedings where, increasingly, the accused made use of the services of a solicitor. When an individual was committed for trial the depositions from both hearings were sent to the assize court and there used by the prosecutor to construct a narrative designed to guide a jury to convict.

Before a case got to court, however, a grand jury comprising 23 magistrates heard the prosecution evidence from the mouths of the prosecutor and witnesses. If the presumptive evidence against the accused was sufficiently convincing, they deemed the indictment a true bill; in the contrary case, no bill. Suspects who had also been committed by a coroner were tried first upon indictment or, if no bill was found, solely upon the inquisition.⁶² The actual trial took place before a judge and jury of twelve men. Judges took notes of the oral evidence, sometimes put questions to witnesses (for their own elucidation or to aid a prisoner undefended by counsel), and finally summed up the evidence for the jury, noting any particularly relevant points of fact or law. In 1822, these procedures were summarised by Charles Cottu (1778–1849), a French observer, who raised two additional points of interest: surgeons tended to give their evidence just before the defence witnesses; and prisoners and prosecutors often had a barrister to speak for them at trial, although this was more common in the provinces than in London.⁶³

Legal historians studying the development of the criminal trial have concentrated on the emerging law of evidence, the privilege against self-incrimination, the adversary system, and the relationship between judge and jury. John Langbein and others have concluded that many of the most important changes identified took place during the eighteenth century, stimulated by the increasing presence of defence counsel.64 This became more regular in the 1730s, as judges presiding over criminal trials attempted to correct the imbalance between the unaided accused and prosecutions progressively more reliant upon solicitors and thief-takers,65 but the key turning point came in the 1780s, "when there was a spurt in the reported use of defence counsel." 66 T. P. Gallanis has put forward the most convincing explanation for the timing of this development: the decisive factor was the cessation of transportation to America in 1775. The principal punishments short of death then became "diseaseridden prisons or transportation to the fledgling and dangerous colony in Australia" — unpleasant prospects that defendants sought to avoid by employing defence counsel.67 Furthermore, the 1780s was a decade of unprecedented concern about crime manifested in expanded use of the death penalty.68 The value of defence counsel lay in their ability to cross-examine witnesses: the defendant avoided making dangerous admissions during the course of trying to do so himself; also, a vigorous cross-examination could lead to a directed verdict, so that the accused did not have to say anything at all.69

Although lawyers were slow to acknowledge it, doctors had a vital role to play in prosecuting crimes against the person: the prosecution had to specify and prove all the facts and circumstances that constituted the offence alleged, including the medical facts that supported a charge of homicide or rape. As successive treatises on criminal law defined crimes ever more carefully, the importance of medical evidence became increasingly overt in the works of the most highly respected and widely cited legal authors of the eighteenth and nineteenth centuries. This is most apparent in treatises on the law of evidence. In English law, an act became a crime when two conditions were satisfied: there was, first, a will to do harm and secondly, an unlawful act consequent upon it.70 Medical evidence gained a recognized status as one of several complementary forms of necessary proof of these two conditions. Doctors could testify to the mental competency of the accused, to establish that they were of "sound discretion" and capable of forming a vicious intent; but they more frequently gave evidence about the nature of the injuries sustained by the victim, to help establish the act alleged.

As stated by Brian Levack, the law of evidence in England is "essentially a law of jury control" created by judicial management of courtroom procedure, including decisions about what types of testimony to allow and the instructions given to juries.71 The modern law of evidence began to develop during the eighteenth century and was, according to Langbein, clearly in place by the mid-nineteenth century, driven by the increasing presence of lawyers in criminal trials. Judges had to control the oral evidence given by witnesses, the questions put to them by prosecution and defence counsel, and the inferences that juries were to draw from the evidence they heard. While the rapid development of adversary criminal procedure in the last quarter of the eighteenth century made the law of evidence possible,72 nothing in Langbein's analysis suggests the impact that medical witnesses might have had on this process. Gallanis reached a similar conclusion about the origins of modern evidence law, but dated its creation to the somewhat narrower period bounded by the texts of Sir Geoffrey Gilbert (1754) and Thomas Starkie (1824),73 both of whom employed medicine-related examples. Prompted by courtroom dilemmas caused by the 1624 Infanticide Act, which inferred murder from the fact of concealing the birth and death of an illegitimate infant, Gilbert cited the statute in relation to "the elements of a civil action or criminal charge, the defenses available under it, and the proof necessary to sustain it."74 Starkie discussed a number of issues that Gilbert ignored, including expert evidence, witnesses allowed to refresh their memory with notes made at the time of the events in question, and the role of lawyers in examining witnesses.75 These, as we will see, were all points of relevance to medical witnesses.

The first formal statement about the role of what we now designate the expert witness was made in Capel Lofft's 1791 edition of Gilbert's Law of Evidence, noting that "in proportion as experience and science advocates, the uncertainty and danger from this kind of proof diminishes."76 Using poisoning and infanticide as examples, Lofft put into words what had by then become typical practice in cases of felonious assault: "when testimonies of professional men of just estimation are affirmative, they may be safely credited; but when negative, they do not amount to a disproof of a charge otherwise established by strong, various, and independent circumstances."77 Thirty years later one of the most prolific writers of legal treatises and digests of the nineteenth century, barrister J. F. Archbold, was less ambiguous about what doctors contributed to criminal trials: it was their professional opinion on "the probable result of or consequence from certain facts already proved." 78 This was a unique role, because most witnesses may testify only to what they experienced at first hand, and so it necessitated certain protocols. Medical witnesses could not read their evidence, but they could refresh their memory from books or notes seen or made at the time. If however a doctor knew a fact only from seeing it in a book or paper, that publication had to become evidence.79 By 1922, when Archbold's text had expanded to over three times its original length, all of these points appeared in very similar language, but the term used to denote this special witness category was "experts." 80

From the early eighteenth century, medical men provided their opinions about the relevance of the facts that lay within their own "knowledge and recollection" — that is, the facts they had seen for themselves and, in so doing, implicitly guided the court in its decision-making responsibility. In order to demonstrate this, we must examine archival records to get a clear picture of actual practice.

Aims, Methods and Sources

As should by now be evident, the history of medico-legal practice sits at the intersection of three hitherto rather separate areas of scholarship, and this project seeks to bridge some of the gaps by examining medico-legal work as a contributing factor in the investigation of violent felonies,⁸¹

particularly homicide (murder, manslaughter and infanticide) and, to a lesser extent, rape. Although these were by no means common offences, they provide a systematic indicator of local efforts to apply medico-legal principles in the courts of assize where felonies were tried, and at pre-trial stage in inquests and magistrates' committal hearings. To provide a comparative, nationally representative analysis, medico-legal experience and practice will be examined in three distinct regions: London; the eight counties of the Oxford Assize Circuit stretching from Berkshire to the Welsh border; and Wales and its neighbouring English county, Cheshire. In order to take in the important socio-legal changes that affected medico-legal practice, the analysis covers the period between about 1700 and the First World War. The temporal focus reflects the parallel developments in the history of law, crime and medicine that together acted to shape medico-legal work, ensuring the inclusion of vital transitions in legal practices and policing systems, as well as important institutional, intellectual and educational developments in medicine. Appendix 1 sets out the socio-legal framework by listing the key pieces of legislation relevant to the themes of the book, together with related historical and professional milestones, in an annotated chronology intended to provide a summative overview of the context within which medico-legal practice occurred. By 1914 the growing demarcation between forensic medicine and forensic science, soon to be compounded by the effects of war, marked the start of a new chapter in the history of crime investigation and thus a natural ending point for this study. Emphasis throughout is placed on the contributions made by medical practitioners to criminal inquiries, to assess the intrinsic content of the medico-legal work undertaken and its impact on the vital processes of investigation, prosecution and trial. The aim, then, is to study medico-legal work within the framework of the totality of actions carried out to achieve the effective administration of justice.

A series of sub-questions shape the research:

- 1. What was the nature and extent of medico-legal practice across England and Wales, and how did this change during the period 1700-1914?
- 2. Who provided medico-legal testimony, and how/why did they come to the attention of officers of the criminal justice system?
- 3. How important were institutions such as hospitals, medical schools, workhouses, colleges and asylums as factors shaping the local availability of forensic knowledge and practice?
- 4. What was the extent of scientific forensic practice prior to 1914, and what was its relationship to local medico-legal provision?
- 5. How was medico-legal evidence deployed and received in the criminal courts and what impact did this have on the professional development of medico-legal witnesses?

To address these questions I have adopted a methodology common to the social history of crime:82 a regional, quantitative and qualitative study based principally on the records created by the criminal justice system. The regions to be studied have been selected to facilitate direct comparison between London, which was at once the most populous city in the country, "the heart of legal England" and a centre of medical education;83 provincial regions of England; and Wales. The specific counties under study create a fully contiguous area that, by the early nineteenth century, encompassed some of the most heavily populated and economically diverse parts of England as well as a significant agricultural

hinterland. Staffordshire was part of a broad western spine of urbanisation, and the border counties of Cheshire, Shropshire and Monmouthshire were uniquely situated between England and Wales.

Figure 1.2 shows the geographical relationship of the selected counties. (There is a small gap between Berkshire and Middlesex occupied by Surrey and Buckinghamshire, but at 2.92 km it is small enough to be considered negligible.) The wide geographical scope is important for four reasons. Firstly, it allows cross-border investigative practices to be identified, whereby magistrates or the police from different counties worked cooperatively to solve a case, a medical practitioner from one county was called in to examine a body found in a neighbouring one, or samples were sent from one county to an expert in another. Secondly, this approach facilitates consideration of the extent to which this medical expertise was peripatetic or local.84 Thirdly, the conclusions reached will reflect typical practices associated with particular patterns of reported criminality, in the context of medical and policing provisions, and so will be more widely portable to other parts of the country than a study based solely on London or a single county. Finally, as a culturally separate but legally, medically and politically integrated part of Great Britain, Wales provides a self-contained case study and a contrast to England which suggests the possible importance of the concept of the periphery.85 Three peripheries are discernible: all the areas of England outside London; Wales in relation to England; and rural areas located on the periphery of English and Welsh towns. What impact did being 'on the periphery' have on medico-legal practice?

<FIGURE 1.2 HERE>

The analysis is based on five main types of sources: records created by the criminal justice system, chiefly pre-trial depositions taken by coroners and magistrates but also inquisitions, recognizances, bills and indictments; trial reports published in newspapers, pamphlets and the Proceedings of the Old Bailey; police and government memoranda; professional literature such as legal and medical texts; other manuscript and printed sources including diaries, journals, letters, trade directories and obituaries. The Proceedings and depositions were used to construct a dataset of 2,615 cases of rape and especially homicide that occurred across the 22 counties studied (see Tables 3.1–3.4 in Chapter 3). Thousands of individual documents were consulted so as to provide full details for each separate criminal case; and further research was done on hundreds of individual doctors named in the files, in order to develop a detailed picture of their medico-legal careers. All cases in the dataset were tried before the highest criminal courts in the country: the English assizes, periodic courts held around six circuits (each comprising five to eight counties) of which the Oxford remained unchanged throughout the period of study; the Welsh Court of Great Sessions, which was established in 1543 and organised into four circuits; and the Court of Great Sessions of the palatinate of Chester (Cheshire). In 1830 Cheshire and the Welsh counties were absorbed into the English assize system and two new circuits were created: North Wales including Cheshire, and South Wales. Middlesex was not on any circuit: until 1834 crimes committed in the county or in the City of London were tried at the Old Bailey, or Sessions House, which was then renamed the Central Criminal Court and its jurisdiction extended to parts of Essex, Kent and Surrey. The Old Bailey thus became the assize court for these areas; it also gained jurisdiction over offences committed on the high seas or elsewhere abroad previously tried by the Admiralty.

The records created by these courts are exceptionally rich, but a number of caveats should be noted. The nature of the surviving material means that direct quantitative and to some extent qualitative comparison between the years before and after 1830 is unfeasible. The criminal records of the Court of Great Sessions "are more comprehensive than their English assize counterparts," 86 but they do not include Monmouthshire, which was culturally part of Wales but administratively part of the Oxford Circuit, for which the surviving pre-1830 depositions are limited. Files for the twelve counties of the Welsh Great Sessions cover all known criminal cases up to 1830, catalogued from 1730 in an online database which includes trial outcomes. All of the assize and Great Sessions records were sampled. For the former, entire years of criminal depositions were read, including all surviving files to 1845, and from 23 of the following 69 years; for the latter, selections were made on the basis that the case file included depositions. The surviving criminal files for the palatinate of Chester are as voluminous as the Great Sessions material but are not catalogued or sorted; I therefore sampled twenty years between 1756 and 1824. For London and Middlesex, the digitised Proceedings of the Old Bailey provide the main source of data: the transcripts of thousands of trials held in the period 1674 to 1913 (the year before my coverage for the other counties ends).87 Using the offence categories assigned by the project creators, all murder and manslaughter trials for London and Middlesex from 1700 to 1749 were included, in order to provide insight into medico-legal practice prior to and just after the important decade of the 1730s which, as we saw above, heralded the regular presence of medical witnesses and defence counsel.88 All trials for infanticide were analysed for the years 1700 to 1913, but its nineteenth-century allied offence, concealment of birth, was excluded because such trials were not fully reported. A broad sampling technique for murder trials after 1749 included the 1780s and then groups of years set apart by successively smaller intervals, taking in the crucial 1830s and similarly excluding trials that did not include actual testimony.89 All rape trials held at the Old Bailey after 1739 were examined but only those that recorded testimony - rather than a brief account of the verdict or legal arguments, were entered into the database; the last substantive entry is for a trial held in 1797 and only three cases after 1800 could be included.

After 1830 the records for all parts of the country except London and Middlesex are incomplete: almost no cases of rape survive among the extant depositions; homicide files survive well but not in their entirety. Depositions in cases of rape-murder record medical evidence of both crimes, but my dataset is comprised mainly of homicides, with a small group of Georgian rape cases from London and Wales. Textbooks can fill some gaps from the perspective of professional literature, but it is not possible to study medico-legal practice in Victorian rape trials with the depth possible for homicide, a problem compounded by journalistic prudery: from 1796 a self-imposed censorship restricted the reporting of Old Bailey rape trials, 90 and Victorian newspapers often claimed that the details of such cases were unfit for publication. But for homicide trials newspaper reports provide a vital source of information: they record, often verbatim, what people said in court. This includes the judge's charge to the grand jury and summing up, barristers' opening and closing arguments, witness testimony and cross examination, jurors' questions, and any statements made by the accused. Using newspapers, it is possible to examine the reception of medico-legal evidence in the assize courts, to supplement the information provided by depositions and the Old Bailey Proceedings (the latter usually exclude the statements made by judges and lawyers). The provincial press delivers a voluminous source of crime news,91 particularly since the advent of online resource The British Newspaper Archive in 2011,92 and it is reliable. According to Judith Rowbotham and Kim Stevenson, the Victorian press can be used as a source of fact, information about legal roles, and public perceptions of crime and criminal justice. Legal professionals produced most of the court reporting: their detailed explanations were intended to reinforce a positive public awareness of the mechanics of criminal justice because "a legal system

works effectively only when its operations have a firm basis in public consent."⁹³ Methodologically, nineteenth-century newspaper reportage offers precisely the detail needed to gauge the reception and impact of medico-legal evidence in the criminal courts, though some points may well have been left out or downplayed. Systematic searches were made for each case of murder and infanticide in two principal online repositories, *Welsh Newspapers Online* and *The British Newspaper Archive*, as well as general searches to identify individuals such as coroners and police surgeons.

While the newspapers themselves may contain accurate trial reports, their use by historians is not without risk. Tim Hitchcock has suggested that, due to the problems associated with digitisation and optical character recognition, searches of online historical resources can be neither fully systematic nor entirely complete.⁹⁴ Certainly it became evident that some online titles produce more legible search results than others, as do newspapers published after about 1890. Similarly, what might seem to be minor transcription errors in the Old Bailey *Proceedings* could be problematic because medical terms and doctors' names were important pieces of information that were not always transcribed correctly. But in both scenarios the original documents were also available online and so all factual details were checked and newspaper reports of the same trial could be cross-checked. Trial accounts produced from shorthand notes for commercial purposes were also used, particularly when more than one edition was available for comparison.⁹⁵ I would argue that the brevity with which medical evidence was sometimes reported suggests the extent to which it was considered an unexceptional part of the criminal justice process, as for example in this account of the trial of John Griffiths, who was executed in 1811 for wife murder: "Dr Howell and the former witness proved satisfactorily that the deceased was poisoned."⁹⁶

The reliance on records related to a formal criminal charge suggests that the data has been shaped by two influences: the fact that a crime was reported and investigated as such by the authorities; and the use of medical evidence obtained on behalf of the prosecution by officers of the state, who generally had more resource advantages than the accused had. As social historians of crime have long acknowledged, assumptions about class and social status pervaded the justice system, 97 while qualifications about the 'dark figure' of unknown or unreported crime are usually applicable,98 even in relation to homicide.99 However, my intention is not to calculate crime rates, which clearly are affected by the dark figure, but rather to identify medico-legal practice in the two types of crimes where we might expect it most frequently to be found and, given their capital nature, have the greatest potential impact on trial outcomes.100 Of course coroners held more inquests on people who died by accident or suicide than homicide, and the use of post-mortem examinations has been documented in such cases; but the findings suggest considerable regional variation, as well as a marked reluctance to resort to medico-legal examination in cases of presumed suicide.101 Indeed, under the terms of the Criminal Justice Act 1826 there was no requirement for coroners to take written evidence unless a charge of murder or manslaughter was likely to ensue,102 leading Pamela Fisher to note that "witness depositions rarely exist, other than for cases that went before the assize courts."103 Meaningful results can therefore be obtained by comparing extant criminal cases: while the selected files reflect medico-legal work undertaken in a minority of all recorded crime, 104 they relate to the most serious types of violence and so are a *significant* minority, typical of the routine use of forensic knowledge in felony trials.

The inherent class biases of the past are less easy to dismiss: members of the working or labouring class far outnumber the middle or upper classes in the extant criminal records, with the exception of

a few notable causes célèbres. It is entirely possible that, in the absence of a statutory duty to notify the coroner of cases within his jurisdiction,105 criminal deaths in respectable families went unnoticed or unreported. Coroners could order an inquest on a deceased person only after notification by a member of the public, and evidently used a selection process to separate the potentially criminal from the mundane cases. But to all intents and purposes selection began at the local level, with the family, friends, neighbours, doctors and constables who provided notification: they decided that a case was one for the coroner, based on obvious signs of violence, community suspicion, or even financial imperative. As we cannot study the records of the cases never subject to inquest or for which no witness statements exist, depositions in prosecuted cases offer the most consistent source of information on medico-legal work and the medical practitioners who carried it out. They afford a further analytical prospect, moreover, because barristers were usually instructed just before the assizes began and so sometimes annotated the witness statements, providing a summary of the main points of the prosecution and an indication of where the medical evidence was seen to fit. Additionally, the increasing presence of attorneys at inquests and committal hearings, questioning and cross-examining witnesses, sheds light on the issues that ignited disagreement or attracted the attention of defence counsel seeking to undermine the prosecution case.106

One further methodological point must be borne in mind. Throughout the period under study, the criminal courts in Wales were in theory no different in operation than the English assizes, with the major exception of language. Office holders had to be bilingual, but in 1800 perhaps 70 per cent of the people spoke only Welsh;¹⁰⁷ by 1900 this figure had dropped to about 15 per cent.¹⁰⁸ The use of translators in court was commonplace, albeit their presence was not recorded systematically;¹⁰⁹ so depositions have been doubly mediated, first by the process of translation and then by transcribing practices. Admittedly, this process remains largely hidden, but where revealed in depositions and trial accounts legal officials had evidently taken care to ensure an accurate record of what Welsh deponents and defendants actually said.¹¹⁰ Not only was this a legal requirement,¹¹¹ but the speed at which legal proceedings occurred left little time for coroners, clerks or magistrates to put words in the mouths of witnesses.¹¹² Deletions and insertions also suggest that depositions give an accurate account of pre-trial testimony, the purpose of which was to establish the facts of a case: surprises at trial were unwelcome and witnesses normally repeated the evidence contained in their deposition.

Argument and Structure

Local influences on medico-legal practice, and therefore on the emergence of forensic expertise, were crucial and included the investigations undertaken by coroners, magistrates and (after the midnineteenth century) the police. The competence and zeal of local medical practitioners were also important. At the same time, local reactions took place in relation to national trends in the processes of criminal justice. This is why, for example, there was more variety of medico-legal experience in Glamorgan than in any other Welsh county: it was one of the few places in nineteenth-century Wales where the number of reported homicides might permit a doctor and the police to develop a degree of forensic experience; a growing population necessitated an extensive medical infrastructure; and rising crime rates led to the appointment of stipendiary magistrates. These sorts of demographic and structural issues help to explain the public dominance of London-based experts: London was where most of the institutions which tended to employ such professionals were located earliest and in the largest numbers, teaching hospitals and the Metropolitan Police being important innovators. Since there was no formal system for employing forensic practitioners and no way to become an 'expert' prior to the creation of specialist posts, legal officials consulted those who were close at hand. Expertise of the type we associate with modern forensic activity developed from hands-on practice that, for a small group, was combined with teaching or a hospital post; for others, it evolved from their role as a police surgeon. But this group of experts were the exception, not the rule.

Medico-legal testimony in homicide cases was normally provided by local surgeons, who carried out some form of body inspection at the explicit request of a coroner or magistrate. This changed during the period of study, from simple external examination and wound measurement, to a more selective anatomization (opening only the evidently injured part of the body), to a full post-mortem in which both the body and brain were examined in order to identify a specific cause of death as well as the manner of death.113 Medical practitioners began to adopt a formal forensic language: by the 1830s references to 'opening' the body had largely given way to the term 'post-mortem'. However, causes of death remained surprisingly vague and it is not clear that what practitioners claimed was a postmortem was in fact the full procedure implied by the term. The lack of a precise cause of death was especially problematic in cases of newborn child murder, when indeterminate medical evidence made deliberate killing impossible to prove.114 In most cases, forensic evidence was not the main form of proof: circumstantial and eyewitness evidence was equally if not more important.115 As late as 1886, for example, a Glamorgan man was convicted and executed for murder even though no post-mortem had been conducted. Given the deceased child was drowned and the killer caught within minutes this is perhaps understandable; but in an example of the locally contingent practices that this study seeks to uncover, the medico-legal work of the workhouse surgeon, appearing in at least his seventh homicide case, seems incomplete by the standards evident elsewhere at the time.116

Few cases of homicide, even in the early eighteenth century, involved no medical witness at all; most towns and villages had a local surgeon or surgeon-apothecary, often more than one. Physicians were fewer in number and much less visible in the extant legal records: their focus on internal medicine rather than the external body-centred practice of the surgeon meant they were rarely the obvious practitioner for coroners or magistrates to turn to in cases of interpersonal violence. This began to change in the nineteenth century, most clearly in relation to questions of criminal responsibility, as psychiatrists sought to establish themselves as experts on mental derangement. They were preceded into the courtroom by the man-midwife, another area of medical specialism that found a ready entrée to the legal realm, displacing female midwives in the process. During the first half of the eighteenth century women had acted as medico-legal witnesses in cases of rape and infanticide, but over the next 25 years midwives were replaced by male surgeons, only some of whom were also man-midwives.¹¹⁷ The evidence drawn from two centuries of medico-legal practice shows that members of the medical profession supplied knowledge required by the criminal justice system; the following chapters investigate the nature of the exchange.

Chapter 2 examines the place of forensic medicine in English medical education, to trace its gradual adoption into the curriculum: by 1831 it had become a compulsory subject for all would-be general practitioners. To identify what students were taught and could reasonably be expected to know if they were called upon in a medico-legal capacity, the chapter then uses textbooks and three sets of

lecture notes to provide a detailed overview of the course content at four particular points in time. These include 1788, when Samuel Farr published the first English-language textbook of forensic medicine; 1836, when William Cummin delivered a course of lectures in London; 1869, based on lecture notes assembled by Thomas Scattergood at the Leeds School of Medicine; and 1900, when a medical student at the University of Edinburgh compiled a set of notes during his attendance at a two-month course taught by Professor Henry Littlejohn. Collectively, these sources support two arguments. Firstly, following the reforms of the early 1830s, the average British-trained general practitioner had access to a basic knowledge of forensic medicine and medico-legal practice, and was therefore not wholly unprepared to be called upon in a criminal case. Secondly, the somewhat disproportionate stress on infanticide suggests that the effort to control this offence was particularly relevant to the development of forensic medicine and the refinement of medico-legal practice.

Chapter 3 presents a quantitative overview of the criminal cases on which the book is based, and in so doing identifies the different channels through which medico-legal testimony was obtained. The content and impact of such testimony, and how it changed over time, is examined using homicide cases to explain how surgeons met the needs of the criminal justice system as it evolved over the course of the eighteenth and nineteenth centuries. The focus lies on post-mortem examination of the dead: the main causes of death were head wounds, body blows, and stab wounds — injuries frequently inflicted in so-called fair fights or by domestic violence; crime historians have shown that popular beliefs about acceptable levels of violence helped to shape trial outcomes.118 Most of these cases were uncontroversial, however, at least in respect to the medical evidence: the cause of death was straightforward to identify and so expert witnesses were rarely needed. The chapter will also consider the role of insanity as a defence to homicide: prison medical officers emerged as recognised authorities on mental illness and crime in the 1870s, as a result of changes in criminal procedure initiated by government. Chapter 3 therefore tackles questions of typicality in medico-legal practice by considering the dataset in its entirety. The links between medicine, location and crime are also explored, via illustrative case studies of selected medical professionals who through their role as coroners or authorities played a greater than average role in criminal investigations. This chapter considers the development of institutions and offices as sources of medical expertise, particularly the medical officers to workhouses, prisons, asylums and hospitals; and police surgeons. It also seeks signs of recognised expertise through the use of cross-border consultation. In Wales, for example, this may have been related to geography but was more likely because the staff of the growing number of hospitals, medical colleges and universities were located mainly in England. For example, in 1876 magistrates in Flintshire sent a liver to be examined by the resident surgeon at the Royal Infirmary in Liverpool.119 Similarly, specialists located in larger regional cities like Birmingham were consulted by magistrates in Staffordshire and Shropshire.120

Chapter 4 examines medico-legal practice in cases of infant murder. Mark Jackson has shown that the provisions of the statute of 1624, which presumed that a single woman who gave birth in secret to an infant later found dead was guilty of murder, made it increasingly likely that juries would expect to hear medical testimony "as to the cause of death and the possibility of still-birth."¹²¹ This, combined with a growing interest in the body as a source of knowledge, meant that the inquest became "the major form of pre-trial inquiry into suspicious infant deaths."¹²² The historiography tends to focus on the medically tricky task of establishing live birth and separate existence,¹²³ or the social context of infanticide as a woman's crime frequently brought to light by other women,¹²⁴ but recently Elaine Farrell and Tim Siddons have pointed out the important yet under-researched role of

the police in nineteenth-century infanticide investigations.125 The chapter combines elements of all three historiographical strands, to consider the medico-legal approach to infant murder within the context of the whole investigation. Thus, although doctors were primarily interested in the victim's body, the focus of their interest varied depending on the infant's age: different forensic approaches were needed for newborns and older babies, and laymen accordingly had different roles in revealing the crime. Moreover, many doctors took on investigative but value-laden and sometimes antagonistic roles in dealing with reputed mothers, using intrusive physical examinations to establish recent delivery,126 or reaching conclusions about sanity based on lay perceptions, often in relation to assumptions about unmarried women and always at the behest of the police, coroner or magistrate. The chapter therefore looks carefully at the changing content of medical evidence in cases of infant murder, as well as the medically-inflected comments of lay witnesses and the accused women themselves, and then turns to consider the presentation and reception of medical evidence in court. The trial notebooks of Samuel Heywood (1753–1828), chief justice of the Carmarthen Circuit in South Wales from 1807 to 1828, are used as a source of information about the structure and content of criminal trials, the judge's prior preparation and attention to detail and, most crucially, the evidence presented and its interpretation. Many scholars have noted that doctors were reluctant to make statements that might lead to conviction, or were simply embarrassed by their ignorance in the witness box; but there were numerous instances where local surgeons were fully prepared to state that an infant had been murdered, particularly when the body showed signs of violence. It was up to the jury to make of that what they would, guided by the judge — who frequently pointed out that the pre-trial evidence was too weak to sustain a conviction. This chapter therefore uses medicine as a way to examine the history of criminal procedure revealed by judicial control of the jury.

The final chapter considers the active role of medical practitioners in crime scene investigation, as a means of examining two related themes: the position and status of the expert witness; and the relationship between forensic medicine and forensic science. The distinction between them can best be expressed in relation to their principal concern or focus of interest: in forensic medicine, it is the body; in forensic science, it is things (which may be in, on or near a body). The modern expert witness emerged in the context of nineteenth-century urban poison and insanity trials, when a strong link between expert status and professional status was established.127 But who deemed an individual to be competent to take on the role of expert, and how was that role acknowledged? Following a study of the on-the-ground work done by doctors at crime scenes and their use of scientific aids to investigation, the chapter will use financial data not previously reflected in the historiography to show that the attribution of expert status was locally determined. The notion of who was an expert was relative to who was not: trust and credibility were vested in medical professionals by officers of the law, and since most homicide cases were not mysterious but required only good attention to detail, local practitioners could act as experts. This chapter contributes to the historical interest in forensic science and scientific policing, 128 but adopts a more practice-led than epistemological focus for the period before the First World War.

While new in itself, the analysis presented here dovetails with a broader re-evaluation of eighteenthand nineteenth-century crime, policing and criminal justice practice that has been under way for two decades. However, its innovative examination of the contribution made by medical practitioners to the investigation and prosecution of violent crime goes further than the existing historiography, both in scope and detail: it demonstrates the longstanding and influential impact doctors in England and Wales had on the procedures of criminal justice, prosecution strategies, and jury expectations. This yields remarkable new findings about aspects of medical practice hitherto overlooked by historians of medicine, and offers criminal justice historians a fresh way to contemplate the professional links on which the criminal justice system depends. In bringing the various strands of the book together, the concluding chapter will review the main arguments and conclusions on the role of medico-legal practice in developing policing and courtroom processes, indicate their wider significance and ramifications, and discuss the several directions in which future research might usefully go.

Notes

4 Clive Emsley, Crime and Society in England 1750-1900, fourth edition (Harlow: Pearson, 2010).

⁵ David Taylor, *The New Police in Nineteenth-Century England: Crime, Conflict and Control* (Manchester: Manchester University Press, 1997); David J. A. Cairns, *Advocacy and the Making of the Adversarial Criminal Trial 1800-1865* (Oxford: Clarendon Press, 1998); John H. Langbein, *The Origins of Adversary Criminal Trial* (Oxford: Oxford University Press, 2003).

⁸ Anna Clark, *Women's Silence, Men's Violence: Sexual Assault in England 1770-1845* (London: Pandora, 1987); Kim Stevenson, "'Most intimate violations': Contextualising the Crime of Rape," in *Histories of Crime: Britain 1600-2000*, ed. Anne-Marie Kilday and David Nash (Basingstoke: Palgrave, 2010), 80-99; Garthine Walker, "Rape, Acquittal and Culpability in Popular Crime Reports in England, *c*.1670–*c*.1750," *Past & Present* 220 (2013): 115-142.

⁹ The Oxford Dictionary of National Biography does not mention Dease's Remarks on Medical Jurisprudence, neatly highlighting the neglect of medical contributions to legal processes that existed until quite recently. See C. Creighton (2004-09-23), "Dease, William (c. 1752–1798), surgeon," Oxford Dictionary of National Biography (retrieved 6 Dec 2017, http://www.oxforddnb.com/view/10.1093/ref:odnb/9780198614128.001.0001/odnb-9780198614128-e-7398).

¹⁰ This comment was made by Walker in relation to rape, "Rape, Acquittal and Culpability," p. 115 but holds just as well for all forms of interpersonal violence, which has clearly become less acceptable since the early modern period. See, for example, J. Carter Wood, "A Useful Savagery: The Invention of Violence in Nineteenth-Century England," *Journal of Victorian Culture* 9 (2004): 22-42.

¹¹ Douglas Hay and Francis Snyder, "Using the Criminal Law, 1750-1850: Policing, Private Prosecution, and the State," in *Policing and Prosecution in Britain 1750-1850*, ed. Douglas Hay and Francis Snyder (Oxford: Clarendon Press, 1989), 3-52; David Philips and Robert D. Storch, *Policing Provincial England 1829-1856: The Politics of Reform* (London and New York: Leicester University Press, 1999); Andrew T. Harris, *Policing the City: Crime and Legal Authority in London, 1780-1840* (Columbus: Ohio State University Press, 2004); Ruth Paley, "Dragging the Law into Disrepute," in *Law in the City: Proceedings of the Seventeenth British Legal History Conference 2005*, ed. Andrew Lewis, Paul Brand and Paul Mitchell (Dublin: Four Courts Press, 2007), 283-304.

¹ Samuel Farr, *Elements of Medical Jurisprudence* (London: T. Becket, 1788), 68. Dease was even more explicit than Farr: "the surgeon, when called on, has no alternative; he must either avow his ignorance, or deliver his opinion." See William Dease, *Remarks on Medical Jurisprudence; Intended for the General Information of Juries and Young Surgeons* (Dublin: James Reilly, 1793), p. 3.

² Bruce P. Smith, "English Criminal Justice Administration, 1650–1850: A Historiographic Essay," *Law and History Review* 25 (2007): 593-634; Greg T. Smith, "Recent Themes in English Criminal Justice History," *Manitoba Law Journal* 35 (2011-12): 285-292.

³ A. H. Manchester, A Modern Legal History of England and Wales (London: Butterworths, 1980); J. H. Baker, An Introduction to English Legal History, fourth edition (London: Butterworths, 2002).

⁶ Shani D'Cruze and Louise A. Jackson, *Women, Crime and Justice in England since 1600* (Basingstoke: Palgrave, 2009).

 ⁷ Pioneering studies include: Keith Wrightson, "Infanticide in Earlier Seventeenth-Century England," Local Population Studies 15 (1975): 10-22; J. A. Sharpe, "Domestic Homicide in Early Modern England," The Historical Journal 24 (1981): 29-48; J. M. Beattie, Crime and the Courts in England 1660–1800 (Princeton: Princeton University Press, 1986); and J. S. Cockburn, "Patterns of Violence in English Society: Homicide in Kent 1560– 1985," Past & Present, 130 (1991): 70-106.

12 John H. Langbein, "The Criminal Trial Before the Lawyers," *University of Chicago Law Review* 45 (1978): 263-316; Stephan Landsman, "The Rise of the Contentious Spirit: Adversary Procedure in Eighteenth Century England," *Cornell Law Review* 75 (1990): 497-609; David Bentley, *English Criminal Justice in the Nineteenth Century* (London: Hambledon Press, 1998).

¹³ Lindsay Farmer, "Criminal Responsibility and the Proof of Guilt," in *Modern Histories of Crime and Punishment*, ed. Markus D. Dubber and Lindsay Farmer (Stanford: Stanford University Press, 2007), p. 52. See also Lindsay Farmer, "With all the impressiveness and substantial value of truth': Notable Trials and Criminal Justice, 1750–1930," *Law and Humanities* 1 (2007): 57-78. The increase in the length of trials, due to the inclusion of more witnesses and more extensive examination and cross-examination of both lay and expert witnesses, was evident to the jurist James Fitzjames Stephen in 1860: "On Trial by Jury, and the Evidence of Experts," in *Papers Read Before the Juridical Society, Vol. 2, 1858-1863* (London: William Maxwell, 1863), pp. 236-249.

¹⁴ The study of the office of coroner was initiated by R. F. Hunnisett in a series of articles published in the late
1950s but especially in his *The Medieval Coroner* (Cambridge: Cambridge University Press, 1961), but over 50 years later had attracted little attention according to Pamela J. Fisher, "The Politics of Sudden Death: The
Office and Role of the Coroner in England and Wales, 1726–1888," PhD thesis, University of Leicester, 2007, p.
7. The work of barrister and criminologist J. D. J. Havard focused closely on inquest procedure in the nineteenth and twentieth centuries: *The Detection of Secret Homicide: A Study of the Medico-legal System of Investigation of Sudden and Unexplained Deaths* (London: Macmillan, 1960).

¹⁵ Indeed, Matthew Lockwood has recently argued that during the early modern period medical evidence was not particularly necessary for effective homicide investigation: *The Conquest of Death: Violence and the Birth of the Modern English State* (New Haven: Yale University Press, 2017), pp. 105-145.

¹⁶ Early research was carried out mainly by T. R. Forbes, a doctor who looked for evidence of medico-legal practice in coroner's inquisitions and selected trial transcripts. See for example: Thomas Rogers Forbes, *Surgeons at the Bailey: English Forensic Medicine to 1878* (New Haven: Yale University Press, 1985); "Inquests into London and Middlesex Homicides, 1673–1782," *Yale Journal of Biology and Medicine* 50 (1977): 207-220; "Crowner's Quest," *Transactions of the American Philosophical Society* 68 (1978): 5-52; "Early Forensic Medicine in England: The Angus Murder Trial," *Journal of the History of Medicine and Allied Sciences* 36 (1981): 296-309; "Coroners' Inquisitions from London Parishes of the Duchy of Lancaster: The Strand, Clapham, Enfield, and Edmonton, 1831–1883," *Journal of the History of Medicine and Allied Sciences* 43 (1988): 191-203. See also Gary I. Greenwald and Maria White Greenwald, "Medicolegal Progress in Inquests of Felonious Deaths: Westminster, 1761–1866," *Journal of Legal Medicine* 2 (1981): 193-264. The Greenwalds were also medical doctors.

¹⁷ Carol A. G. Jones, *Expert Witnesses: Science, Medicine, and the Practice of Law* (Oxford: Clarendon Press, 1994); Ian A. Burney, *Bodies of Evidence: Medicine and the Politics of the English Inquest, 1830–1926* (Baltimore: The Johns Hopkins University Press, 2000); Tal Golan, *Laws of Men and Laws of Nature: The History of Scientific Expert Testimony in England and America* (Cambridge, MA: Harvard University Press, 2004).
¹⁸ Catherine Crawford, "The Emergence of English Forensic Medicine: Medical Evidence in Common-law Courts, 1730–1830," DPhil thesis, University of Oxford, 1987; Jennifer Ward, "Origins and Development of Forensic Medicine and Forensic Science in England 1823–1946," PhD thesis, Open University, 1993.
¹⁹ Most studies focused on London, for example: Forbes, *Surgeons at the Bailey* and Stephan Landsman, "One Hundred Years of Rectitude: Medical Witnesses at the Old Bailey, 1717–1817," *Law and History Review* 16 (1998): 445-494. Fisher's thesis offers a welcome national perspective: "Politics of Sudden Death," 184-211.
²⁰ Michael Clark and Catherine Crawford (eds), *Legal Medicine in History* (Cambridge: Cambridge University Press, 1994). Seven of the 13 chapters focus on England, covering the seventeenth century through to the twentieth.

²¹ Catherine Crawford, "Legalizing Medicine: Early Modern Legal Systems and the Growth of Medico-legal Knowledge," in *Legal Medicine in History*, ed. Michael Clark and Catherine Crawford (Cambridge: Cambridge University Press, 1994), p. 108.

²² Julia Rudolph, "Gender and the Development of Forensic Science: A Case Study," *English Historical Review* 123 (2008): 924-946; Carol Loar, "Medical Knowledge and the Early Modern English Coroner's Inquest," *Social History of Medicine* 23 (2010): 475-491. This is because they examined sources other than inquisitions, which typically do not include evidence about post-mortems or the questioning of medical witnesses. Rather, as Krista Kesselring has pointed out (personal communication, 28 Dec 2017), information of this nature tends to appear in the records generated by "contested cases or other ancillary documents."

²³ Keir Waddington, *An Introduction to the Social History of Medicine: Europe since 1500* (Basingstoke: Palgrave, 2011), pp. 3-15.

²⁴ Mark S. R. Jenner and Patrick Wallis, "The Medical Marketplace," in *Medicine and the Market in England and Its Colonies, c. 1450–1850*, ed. Mark S. R. Jenner and Patrick Wallis (Basingstoke: Palgrave, 2007), p. 16.
²⁵ Catherine Crawford, "A Scientific Profession: Medical Reform and Forensic Medicine in British Periodicals of the Early Nineteenth Century," in *British Medicine in an Age of Reform*, ed. Roger French and Andrew Wear (London and New York: Routledge, 1991), 203-230.

²⁶ Sara M. Butler, *Forensic Medicine and Death Investigation in Medieval England* (New York: Routledge, 2015).
²⁷ Malcolm Gaskill, "The Displacement of Providence: Policing and Prosecution in Seventeenth- and Eighteenth-Century England," *Continuity and Change* 11 (1996): 341-374; Vanessa McMahon, "Reading the Body: Dissection and the 'Murder' of Sarah Stout, Hertfordshire, 1699," *Social History of Medicine* 19 (2006): 19-35. McMahon's pessimistic argument is undermined by Loar, "Medical Knowledge and the Early Modern English Coroner's Inquest." See also Lockwood, *The Conquest of Death*, pp. 111-123 and James Oldham, "The Jury of Matrons," *Georgetown Law*, Fall/Winter 2006, pp. 50-55.

²⁸ Orna Alyagon Darr, *Marks of an Absolute Witch: Evidentiary Dilemmas in Early Modern England* (Farnham: Ashgate, 2011), pp. 209-225, 259.

²⁹ David Harley, "Political Post-mortems and Morbid Anatomy in Seventeenth-Century England," *Social History of Medicine* 7 (1994): 1-28; David Harley, "The Scope of Legal Medicine in Lancashire and Cheshire, 1660–1760," in *Legal Medicine in History*, ed. Clark and Crawford, 45-63.

³⁰ W. B. Ober, "Infanticide in Eighteenth-Century England: William Hunter's Contribution to the Forensic Problem," *Pathology Annual* 21 (1986): 311-319; Mark Jackson, "Suspicious Infant Deaths: The Statute of 1624 and Medical Evidence at Coroners' Inquests," in *Legal Medicine in History*, ed. Clark and Crawford, 64-86; Mark Jackson, *New-born Child Murder: Women, Illegitimacy and the Courts in Eighteenth-Century England* (Manchester: Manchester University Press, 1996), pp. 84-109; Mary Clayton, "Changes in Old Bailey Trials for the Murder of Newborn Babies, 1674–1803," *Continuity and Change* 24 (2009): 347-351. In their work on infanticide in early modern Cheshire, Dickinson and Sharpe focus little on medical evidence but do note that it became more important during the course of the eighteenth century: J. R. Dickinson and J. A. Sharpe, "Infanticide in Early Modern England: The Court of Great Sessions at Chester, 1650–1800," in *Infanticide: Historical Perspectives on Child Murder and Concealment, 1550–2000*, ed. Mark Jackson (Aldershot: Ashgate, 2002), p. 46.

³¹ Joel Peter Eigen, *Witnessing Insanity: Madness and Mad-Doctors in the English Court* (New Haven: Yale University Press, 1995); Dana Rabin, *Identity, Crime and Legal Responsibility in Eighteenth-Century England* (Basingstoke: Palgrave Macmillan, 2004).

³² Crawford, "The Emergence of English Forensic Medicine" and "A Scientific Profession"; Ward, "Origins and Development." Taylor began teaching in January 1831 when the spring lecture series commenced at Guy's: *Public Ledger and Daily Advertiser*, 10 Jan 1831, p. 1.

³³ Olive Anderson, *Suicide in Victorian and Edwardian England* (Oxford: Clarendon Press, 1987), pp. 225-230 on the links between insanity and suicide; Katherine D. Watson, "Medical and Chemical Expertise in English Trials for Criminal Poisoning, 1750–1914," *Medical History* 50 (2006): 373-390; Karen Jane Merry, "Murder by Poison in Scotland during the Nineteenth and Early Twentieth Centuries," PhD thesis, University of Glasgow, 2010. ³⁴ The historiography suggests that apparently objective medical evidence of child rape was interpreted by doctors and jurors through a cultural framework of negative assumptions about working-class pubescent girls, allowing rape myths to influence legal decision-making. See: J. B. Lyons, "Sir William Wilde's Medico-legal Observations," *Medical History* 42 (1997): 437-454; Louise A. Jackson, *Child Sexual Abuse in Victorian England* (London and New York: Routledge, 2000), pp. 71-89; Ivan Crozier and Gethin Rees, "Making a Space for Medical Expertise: Medical Knowledge of Sexual Assault and the Construction of Boundaries between Forensic Medicine and the Law in Late Nineteenth-Century England," *Law, Culture and the Humanities* 8 (2012): 285-304; Victoria Bates, *Sexual Forensics in Victorian and Edwardian England: Age, Crime and Consent in the Courts* (Basingstoke: Palgrave Macmillan, 2016).

³⁵ G. K. Behlmer, "Deadly Motherhood: Infanticide and Medical Opinion in Mid-Victorian England," *Journal of the History of Medicine and Allied Sciences* 34 (1979): 403-427; Tony Ward, "The Sad Subject of Infanticide: Law, Medicine and Child Murder, 1860–1938," *Social and Legal Studies* 8 (1999): 163-180; Mary Beth Emmerichs, "Getting Away With Murder? Homicide and the Coroners in Nineteenth-Century London," *Social Science History* 25 (2001): 93-100; Hilary Marland, *Dangerous Motherhood: Insanity and Childbirth in Victorian Britain* (Basingstoke: Palgrave Macmillan, 2004); Daniel J. R. Grey, "Discourses of Infanticide in England, 1880– 1922," PhD thesis, Roehampton University, 2008, chapters 3 and 4.

³⁶ Ian A. Burney, "A Poisoning of No Substance: The Trials of Medico-Legal Proof in Mid-Victorian England," Journal of British Studies 38 (1999): 59-92 and "Testing Testimony: Toxicology and the Law of Evidence in Early Nineteenth-Century England," Studies in History and Philosophy of Science 33 (2002): 289-314; Tony Ward, "A Mania for Suspicion: Poisoning, Science, and the Law," in *Criminal Conversations: Victorian Crimes, Social Panic, and Moral Outrage*, ed. Judith Rowbotham and Kim Stevenson (Columbus: Ohio State University Press, 2005), 40-56; Roger Smith, *Trial by Medicine: Insanity and Responsibility in Victorian Trials* (Edinburgh: Edinburgh University Press, 1981); Joel Peter Eigen, *Unconscious Crime: Mental Absence and Criminal Responsibility in Victorian London* (Baltimore: Johns Hopkins University Press, 2003).

³⁷ Stephan Landsman, "Of Witches, Madmen, and Products Liability: An Historical Survey of the Use of Expert Testimony," *Behavioral Sciences and the Law* 13 (1995): 131-157.

³⁸ Katherine D. Watson, *Forensic Medicine in Western Society: A History* (Abingdon: Routledge, 2011), pp. 46-50.

³⁹ M. A. Crowther and Brenda M. White, "Medicine, Property and the Law in Britain 1800–1914," *The Historical Journal* 31 (1988), p. 856.

⁴⁰ The turn to specialist experts was most visible in the fields of toxicology and psychiatry during the Victorian period and pathology in the early twentieth century. See Watson, "Medical and Chemical Expertise"; Ian A. Burney, *Poison, Detection, and the Victorian Imagination* (Manchester: Manchester University Press, 2006); Anne Crowther, "The Toxicology of Robert Christison: European Influences and British Practice in the Early Nineteenth Century," in *Chemistry, Medicine and Crime: Mateu J.B. Orfila (1787-1853) and His Times*, ed. José Ramón Bertomeu-Sánchez and Agustí Nieto-Galan (Sagamore Beach, MA: Watson Publishing International, 2006), 125-152; Katherine D. Watson, "Criminal Poisoning in England and the Origins of the Marsh Test for Arsenic," in *Chemistry, Medicine and Crime*, ed. Bertomeu-Sánchez and Nieto-Galan, 183-206; Ian A. Burney, "Bones of Contention: Mateu Orfila, Normal Arsenic and British Toxicology," in *Chemistry, Medicine and Crime*, ed. Bertomeu-Sánchez and Nieto-Galan, 243-259; Joel Peter Eigen, *Mad-Doctors in the Dock: Defending the Diagnosis, 1760-1913* (Baltimore: Johns Hopkins University Press, 2016); Ian Burney and Neil Pemberton, "Bruised Witness: Bernard Spilsbury and the Performance of Early Twentieth-Century English Forensic Pathology," *Medical History* 55 (2011): 41-60.

⁴¹ Norman V. Ambage, "The Origins and Development of the Home Office Forensic Science Service, 1931– 1967," PhD thesis, University of Lancaster, 1987; Norman Ambage and Michael Clark, "Unbuilt Bloomsbury: Medico-legal Institutes and Forensic Science Laboratories in England between the Wars," in *Legal Medicine in History*, ed. Clark and Crawford, 293-313.

⁴² Keith Laybourn and David Taylor, *Policing in England and Wales, 1918–39: The Fed, Flying Squads and Forensics* (Basingstoke: Palgrave Macmillan, 2011); Amy Helen Bell, *Murder Capital: Suspicious Deaths in London, 1933–53* (Manchester: Manchester University Press, 2015); Alison Adam, A History of Forensic Science: *British Beginnings in the Twentieth Century* (Abingdon: Routledge, 2016); Ian Burney and Neil Pemberton, *Murder and the Making of English CSI* (Baltimore: Johns Hopkins University Press, 2016).

⁴³ Cockburn, "Patterns of Violence," pp. 79-87 found that the greatest proportion of homicides were committed with either sharp or blunt instruments, or by beating/kicking, a finding echoed in my study. ⁴⁴ The few works devoted to forensic issues are not concerned with the criminal courts: R. W. Ireland, "Eugene Buckley and the Diagnosis of Insanity in the Early Victorian Prison," *Llafur* 6 (1993): 5-17; T. G. Davies, "Judging the Sanity of an Individual: Some South Wales Civil Legal Actions of Psychiatric Interest," *The National Library of Wales Journal* 29 (1996): 455-467. An extremely brief consideration of 'forensic techniques' is included in Rachael Jones, *Crime, Courts and Community in Mid-Victorian Wales: Montgomeryshire, People and Places* (Cardiff: University of Wales Press, 2018), pp. 72-74. For a recent study of Welsh criminal justice history, see Richard W. Ireland, *Land of White Gloves? A History of Crime and Punishment in Wales* (Abingdon: Routledge, 2015).

⁴⁵ Alun Withey, "Unhealthy Neglect? The Medicine and Medical Historiography of Early Modern Wales," *Social History of Medicine* 21 (2008): 163-174; Alun Withey, *Physick and the Family: Health, Medicine and Care in Wales, 1600–1750* (Manchester: Manchester University Press, 2011); Stephen Roberts, "Necessary Precautions': Public Health in Wrexham 1830–1848," *Transactions of the Denbighshire Historical Society* 45 (1996): 59-88; Anne Borsay, ed., *Medicine in Wales c. 1800–2000: Public Service or Private Commodity* (Cardiff: University of Wales Press, 2003); Pamela Michael, *Care and Treatment of the Mentally III in North Wales, 1800–2000* (Cardiff: University of Wales Press, 2003); Pamela Michael and Charles Webster, eds., *Health and Society in Twentieth-Century Wales* (Cardiff: University of Wales Press, 2006).

46 Thomas Glyn Watkin, The Legal History of Wales (Cardiff: University of Wales Press, 2007).

⁴⁷ Peter King, *Crime and Law in England, 1750–1840: Remaking Justice from the Margins* (Cambridge: Cambridge University Press, 2006), pp. 60-61. For a further example of this thesis see Peter King and Richard Ward, "Rethinking the Bloody Code in Eighteenth-Century Britain: Capital Punishment at the Centre and on the Periphery," *Past & Present* 228 (2015): 159-205.

48 Fisher, "Politics of Sudden Death."

⁴⁹ Grey, "Discourses of Infanticide"; Victoria L. Bates, "'Not an Exact Science': Medical Approaches to Age and Sexual Offences in England, 1850–1914," PhD thesis, University of Exeter, 2012.

⁵⁰ Her thesis, completed at Queen's University Belfast in 2010, has since been published: Elaine Farrell, 'A most diabolical deed': Infanticide and Irish Society, 1850–1900 (Manchester: Manchester University Press, 2013), pp. 48-71.

⁵¹ Nicholas Duvall, "Forensic Medicine in Scotland, 1914–39," PhD thesis, University of Manchester, 2013; Tim Siddons, "Suspected New-born Child Murder and Concealment of Pregnancy in Scotland, c.1812–c.1930," PhD thesis, University of Edinburgh, 2013.

⁵² I am here drawing on the work of Mike Redmayne, *Expert Evidence and Criminal Justice* (Oxford: Oxford University Press, 2001), which notes that the goal of scientific evidence in the criminal process is to improve verdict accuracy.

⁵³ Excellent examples include Beattie, *Crime and the Courts in England 1660–1800*, pp. 267-399; Emsley, *Crime and Society in England*, pp. 192-260; and John Minkes, "Wales and the 'Bloody Code': The Brecon Circuit of the Court of Great Sessions in the 1750s," *Welsh History Review* 22 (2005), pp. 679-685. For property crime, see Peter King, *Crime, Justice and Discretion in England 1740–1820* (Oxford: Oxford University Press, 2000), pp. 47-125 and 221-258.

⁵⁴ For a recent example see Patrick Polden, "Coroners and their Courts," in *The Oxford History of the Laws of England, Vol. 11, The Legal System 1820-1914* (Oxford: Oxford University Press, 2010), p. 951. The chapter is at pp. 934-955.

⁵⁵ Neither Burney, *Bodies of Evidence*, nor Fisher, "Politics of Sudden Death," have much to say about lawyers or the police.

⁵⁶ This term refers to the uniformed, organised, paid police introduced in the late 1820s and 1830s. They were accountable to central or local government rather than parishes; had a wider responsibility for law and order; and contemporaries perceived them as new: David Taylor, *Crime, Policing and Punishment in England, 1750– 1914* (Basingstoke: Macmillan, 1998), pp. 71-87; Emsley, *Crime and Society in England*, pp. 227-260. ⁵⁷ Emsley, *Crime and Society in England*, p. 250.

⁵⁸ Edward Umfreville, *Lex Coronatoria: or, the Office and Duty of Coroners*, Vol. 2 (London: R. Griffiths; T. Becket, 1761), pp. 295-296, 510. The surgeon's contract with the parish covered his payment but, if not, any financial wrangling would be between him and the vestry.

⁵⁹ Richard Burn, *The Justice of the Peace and Parish Officer*, third edition (London: Henry Lintot, 1756), p. 200. ⁶⁰ Umfreville did not mention this, but sixty years later the practice was considered established: [Charles] Cottu, *On the Administration of Criminal Justice in England; and the Spirit of the English Government* (London: Richard Stevens; Charles Reader, 1822), p. 38.

⁶¹ Edward Umfreville, *Lex Coronatoria: or, the Office and Duty of Coroners*, Vol. 1 (London: R. Griffiths; T. Becket, 1761), p. 206.

⁶² Umfreville, *Lex Coronatoria*, Vol. 2, pp. 314-316; pp. 322-330 explains the wording necessary to ensure that an indictment or inquisition charged a particular offence.

63 Cottu, On the Administration of Criminal Justice in England, pp. 87-88.

⁶⁴ Langbein, "The Criminal Trial Before the Lawyers"; John H. Langbein, "The Historical Origins of the Privilege Against Self-Incrimination at Common Law," *Michigan Law Review* 92 (1994): 1047-1085; David Lemmings, "Criminal Trial Procedure in Eighteenth-Century England: The Impact of Lawyers," *The Journal of Legal History* 26 (2005): 73-82.

65 Langbein, Origins of Adversary Criminal Trial, pp. 167-170.

66 Ibid., p. 170.

67 T. P. Gallanis, "The Mystery of Old Bailey Counsel," Cambridge Law Journal 65 (2006), p. 173.

68 David Lemmings, *Professors of the Law: Barristers and English Legal Culture in the Eighteenth Century* (Oxford: Oxford University Press, 2000), p. 208.

69 Ibid., pp. 219-222; Langbein, Origins of Adversary Criminal Trial, pp. 258-284.

⁷⁰ William Blackstone, *Commentaries on the Laws of England*, Vol. 4 (Oxford: Clarendon Press, 1769), p. 21. ⁷¹ Brian P. Levack, review of *Marks of an Absolute Witch: Evidentiary Dilemmas in Early Modern England*, by Orna Alyagon Darr, *Law and History Review* 30 (2012), p. 938.

⁷² John H. Langbein, "Historical Foundations of the Law of Evidence: A View from the Ryder Sources," *Columbia Law Review* 96 (1996), p. 1172.

⁷³ Geoffrey Gilbert, *The Law of Evidence* (Dublin: S. Cotter 1754); Thomas Starkie, *A Practical Treatise of the Law of Evidence, and Digest of Proofs in Civil and Criminal Proceedings* (London: J. & W.T. Clarke, 1824).
 ⁷⁴ T. P. Gallanis, "The Rise of Modern Evidence Law," *Iowa Law Review* 84 (1999), p. 508.

75 Ibid., pp. 518-523.

⁷⁶ Capel Lofft, ed., *The Law of Evidence by Lord Chief Baron Gilbert*, Vol. 1 (London: J. F. & C. Rivington, T. Longman, C. Dilly, W. Clarke & Son, and W. Otridge, 1791), p. 301.

77 Ibid., p. 302.

⁷⁸ John Frederick Archbold, *A Summary of the Law Relative to Pleading and Evidence in Criminal Cases* (London: R. Pheney, 1822), p. 93.

79 Ibid., p. 110.

 ⁸⁰ Henry Delacombe Roome and Robert Ernest Ross, eds., Archbold's Pleading, Evidence and Practice in Criminal Cases, by Sir John Jervis, twenty-sixth edition (London: Sweet and Maxwell, 1922), p. 451.
 ⁸¹ Assault was a misdemeanour and thus falls outside the purview of this project, although it could certainly involve medical witnesses.

⁸² The study of crime and criminals necessitates an investigation of the institutions that created and defined them. Thus, because criminals are identified, labelled and processed by the criminal justice system, its records provide a foundation for any historical investigation of criminality: R. S. Sindall, "The Criminal Statistics of Nineteenth-Century Cities: A New Approach," *Urban History* 13 (1986): 28-36.

⁸³ Daniel Duman, *The Judicial Bench in England 1727–1875: The Reshaping of a Professional Elite* (London: Royal Historical Society, 1982), p. 7; Susan C. Lawrence, "Entrepreneurs and Private Enterprise: The Development of Medical Lecturing in London, 1775–1820," *Bulletin of the History of Medicine* 62 (1988): 171-192.

84 I am grateful to Anne-Marie Kilday for this insight.

⁸⁵ Michael Steed, "The Core–Periphery Dimension of British Politics," *Political Geography Quarterly* 5 (1986): s91-s103.

⁸⁶ Richard Suggett, "The Welsh Language and the Court of Great Sessions," in *The Welsh Language before the Industrial Revolution*, ed. Geraint H. Jenkins (Cardiff: University of Wales Press, 1997), p. 153.

⁸⁷ Silent corrections of factual or transcription errors in the Great Sessions and Old Bailey online databases were made.

⁸⁸ Déirdre M. Dwyer, "Expert Evidence in the English Civil Courts, 1550–1880," *The Journal of Legal History* 28 (2007), p. 101; John H. Langbein, "The Prosecutorial Origins of Defence Counsel in the Eighteenth Century: The Appearance of Solicitors," *The Cambridge Law Journal* 58 (1999): 314-365.

⁸⁹ The selected years include: 1780-89, 1805-09, 1830-39, 1840-46, 1861, 1864, 1870-75, 1881, 1884, 1891, 1894, 1900, 1904, 1911 and 1913. A small number of eighteenth-century murders classed as petty treason, and post-1834 cases that occurred in Essex, Kent or Surrey, were also included. Manslaughter cases were excluded after the 1805-1809 set for reasons of scale: they outnumbered murder trials but were often shorter in length.

⁹⁰ Clark, *Women's Silence, Men's Violence*, pp. 17-18 on the restricted coverage of the sexual details of rape in the *Proceedings* and in newspapers.

⁹¹ Andrew Hobbs, "When the Provincial Press was the National Press (c.1836–c.1900)," International Journal of Regional and Local History 5 (2009): 16-43; on the increasing role played by lawyers as court reporters in the nineteenth century see Judith Rowbotham, Kim Stevenson and Samantha Pegg, Crime News in Modern Britain: Press Reporting and Responsibility, 1820–2010 (Basingstoke: Palgrave, 2013), pp. 25-28, 32-33.

⁹² As James Mussell observes, "the digitization of large tracts of the nineteenth-century press has transformed the terms upon which we discover material and attempt to recover its meanings." See *The Nineteenth-Century Press in the Digital Age* (Basingstoke: Palgrave Macmillan, 2012), p. 28.

⁹³ Judith Rowbotham and Kim Stevenson, "'For today in this arena...': Legal Performativity and Dramatic Convention in the Victorian Criminal Justice System," *Journal of Criminal Justice and Popular Culture* 14 (2007), p. 121.

⁹⁴ Tim Hitchcock, "Confronting the Digital: Or How Academic History Writing Lost the Plot," *Social and Cultural History* 10 (2013): 9-23.

⁹⁵ Even allegedly full trial reports do not record all the evidence given in court. See for example two accounts of the same trial in 1740: the second contains more or different details including three additional defence witnesses; but the surgeon's evidence is the same in both pamphlets. *The Suffolk Parricide; being the Trial, Life, Transactions, and Last Dying Words, of Charles Drew, of Long-Melford, in the County of Suffolk* (London: J.

Standen, 1740) and The Genuine Trial of Charles Drew, for the Murder of his own Father, at the Assizes held at Bury St Edmund's, second edition (London: C. Corbett, 1740).

⁹⁶ *Carmarthen Journal and South Wales Weekly Advertiser*, 20 Apr 1811, p. 4. The 'satisfactory proof' occupied two of 17 pages in the trial judge's notes: National Library of Wales (hereafter NLW), MSS 202D, Notebooks of Samuel Heywood, Vol. 10 (1811), pp. 26-42.

97 Emsley, Crime and Society in England, pp. 57-95.

98 Ibid., pp. 21-56 (p. 24).

⁹⁹ In a widely influential article, Howard Taylor suggested that the police and government rationed murder prosecutions to save costs: "Rationing Crime: The Political Economy of Criminal Statistics since the 1850s," *Economic History Review* 51 (1998): 584-588. See also Peter King, "The Impact of Urbanization on Murder Rates and on the Geography of England and Wales, 1780–1850," *Historical Journal* 53 (2010): 675-678. Historians of infanticide stress the importance of the dark figure: see for example Anne-Marie Kilday, *A History of Infanticide in Britain c. 1600 to the Present* (Basingstoke: Palgrave Macmillan, 2013).

¹⁰⁰ The last execution for rape occurred in 1836; between 1837 and 1867 there were on average about ten executions for murder each year, rising to nearer 17 per year in the period 1868–1899: see *Public Executions 1837–1868*, http://www.capitalpunishmentuk.org/1837.html (accessed 17 Dec 2017) and Steve Fielding, *The Hangman's Record, Volume One 1868-1899* (Beckenham: Chancery House Press, 1994).

¹⁰¹ Victor Bailey, *'This Rash Act': Suicide Across the Life Cycle in the Victorian City* (Stanford: Stanford University Press, 1998), pp. 50-52, 66. In Kingston-Upon-Hull in the period 1837–1899, 13.1% of all suicide inquests included a post-mortem but half that number were conducted in the 1890s alone; and, a higher proportion were carried out on those who died by poison or gunshot than by hanging or drowning. By contrast, Greenwald and Greenwald found that in the City of Westminster in the mid-1860s a minimum of 40% of inquests (on accident casualties) involved a post-mortem, but in cases of suicide the figure was only 11%. Their figure for homicide, 17%, is strangely low, probably because of the way they classified six cases in which the final verdict was not actually one of homicide: "Medicolegal Progress in Inquests of Felonious Deaths," pp. 208, 214-215.

¹⁰² John Tidd Pratt, *A Collection of the Late Statutes, passed for the Administration of Criminal Justice in England* (London: W. Benning, 1827), pp. 4-5.

103 Fisher, "The Politics of Sudden Death," p. 19.

¹⁰⁴ During the nineteenth century there were rarely more than 400 murders reported annually: Emsley, *Crime and Society in England*, p. 42.

105 Havard, Detection of Secret Homicide, pp. 77-96.

¹⁰⁶ For an example of extensive cross-examination of all witnesses, including three doctors, at an inquest, see the case of William Price, who was accused of murdering a soldier: NLW GS 4/398/2/3-5, 9-18, Breconshire, 1827. The attorney, Mr Middleton Powell, was probably acting on behalf of the army, not the accused.
¹⁰⁷ Geraint H. Jenkins, Richard Suggett and Eryn M. White, "The Welsh Language in Early Modern Wales," in *The Welsh Language before the Industrial Revolution*, ed. Geraint H. Jenkins (Cardiff: University of Wales Press, 1997), p. 48.

¹⁰⁸ In 1891 54.4% of the population could speak Welsh, but in 1901 only 15% were monolingual: G. E. Jones, *Modern Wales: A Concise History*, second edition (Cambridge: Cambridge University Press, 1994), pp. 211-212. ¹⁰⁹ John Minkes has pointed out that from the inception of the Welsh law courts in 1543 as part of the process of unification between England and Wales, it was assumed that interpreters would be employed: "Wales and the 'Bloody Code,'" pp. 673-674. Bills compiled by the clerks of assize of the North Wales Circuit in the first two decades of the nineteenth century show that the standard fee paid to court translators was 10*s*. 6*d*. per trial. Later in the century pre-trial translation was done by police officers, legal officials or civilians.

¹¹⁰ See for example the trial of John Roberts, reported in *The North Wales Chronicle*, 29 Jul 1853, p. 3: "As the prisoner spoke in Welsh, he [the coroner] translated it into English, and it was then taken down. He is positive that he gave a correct translation. After it was taken down, it was again translated into Welsh, and read over to the prisoner. It was translated as nearly as possible in the same words as the prisoner had used himself. After it had been read over to the prisoner, he put his name to it."

¹¹¹ William Russell Oldnall, *The Practice of the Court of Great Sessions on the Carmarthen Circuit* (London: J. Butterworth, 1814), "The Practice of the Carmarthen Circuit", p. 24.

112 I am grateful to Sara Butler for this insight.

¹¹³ Drawing on recent historiography, Lynsey Cullen explains the distinction between anatomization and postmortem as lying in the explicit focus of the latter on establishing cause of death: "Post-mortem in the Victorian Asylum: Practice, Purpose and Findings at the Littlemore County Lunatic Asylum, 1886–7," *History of Psychiatry* 28 (2017), pp. 283-284.

¹¹⁴ Jackson, New-born Child Murder, pp. 84-109; Siddons, "Suspected New-born Child Murder," pp. 254-262.
¹¹⁵ William Wills, An Essay on the Rationale of Circumstantial Evidence (London: Longman, Orme, Brown, Green, and Longmans, 1838); Claire Valier, "True Crime Stories: Scientific Methods of Criminal Investigation, Criminology and Historiography," British Journal of Criminology 38 (1998): 88-105; Barbara J. Shapiro, "Oaths, Credibility and the Legal Process in Early Modern England: Part Two," Law and Humanities 7 (2013): 19-54.

¹¹⁶ The National Archives (hereafter TNA), ASSI 72/4, Regina v. Thomas Nash, Glamorgan, 1885. The surgeon, David Howell Thomas of Swansea, had been the main medical witness in six previous murder trials since 1865.
¹¹⁷ Jackson, *New-Born Child Murder*, pp. 70-72; Harley, "The Scope of Legal Medicine in Lancashire and Cheshire," pp. 53-55; Dickinson and Sharpe, "Infanticide in Early Modern England," pp. 45-47; Clayton, "Changes in Old Bailey Trials," pp. 347-351.

118 Shani D'Cruze, *Crimes of Outrage: Sex, Violence and Victorian Working Women* (London: UCL Press, 1998); Martin J. Wiener, *Men of Blood: Violence, Manliness and Criminal Justice in Victorian England* (Cambridge: Cambridge University Press, 2004); J. Carter Wood, *Violence and Crime in Nineteenth-Century England: The Shadow of our Refinement* (London: Routledge, 2004); Desmond J. Newell, "Masculinity and the Plebeian Honour Fight: Dispute Resolution in Georgian England," PhD thesis, Oxford Brookes University, 2016, pp. 172-195.

119 TNA ASSI 65/10, Regina v. Robert Jones, Flintshire, 1876.

¹²⁰ For example, a Staffordshire coroner sent a suspected murderer's clothes to Dr Francis Wrightson, an independent analytical chemist in Birmingham, to determine whether they were stained with blood. See TNA ASSI 6/10, Regina v. Richard Hale, Staffordshire, 1864.

121 Jackson, New-Born Child Murder, p. 86.

122 Ibid., p. 88.

123 R. J. Kellett, "Infanticide and Child Destruction – the Historical, Legal and Pathological Aspects," *Forensic Science International* 53 (1992), p. 9; Grey, "Discourses of Infanticide," pp. 151-175.

¹²⁴ See for example Jackson, *New-Born Child Murder*, pp. 60-83 and Kilday, *A History of Infanticide in Britain*, pp. 52-58.

125 Farrell, *Infanticide and Irish Society*, pp. 120-177; Siddons, "Suspected New-born Child Murder," pp. 185-203.

¹²⁶ Daniel J. R. Grey has examined this issue from a feminist perspective in a narrow time period: "What woman is safe...?': Coerced Medical Examinations, Suspected Infanticide, and the Response of the Women's Movement in Britain, 1871–1881," *Women's History Review* 22 (2013): 403-421.

127 Relevant secondary sources have been cited in notes 36 and 40 above. One might add: Tony Ward, "Law, Common Sense and the Authority of Science: Expert Witnesses and Criminal Insanity in England, ca. 1840– 1940," *Social & Legal Studies* 6 (1997): 343-362; Tony Ward, "Observers, Advisers, or Authorities? Experts, Juries and Criminal Responsibility in Historical Perspective," *The Journal of Forensic Psychiatry* 12 (2001): 105-122; Arlie Loughnan and Tony Ward, "Emergent Authority and Expert Knowledge: Psychiatry and Criminal Responsibility in the UK," *International Journal of Law and Psychiatry* 37 (2014): 25-36; Holly Easton, "Communities and Interactions in Nineteenth-Century Scottish and English Toxicology," MA thesis, University of Canterbury, 2017.

¹²⁸ Adam, A History of Forensic Science, chapters 1 and 2; Burney and Pemberton, Murder and the Making of English CSI, chapters 1 and 2.