

Introduction

Willemijn Ruberg

The eleven chapters in this volume together discuss the ways scientific expertise was used in modern European courtrooms and pre-trial investigations. They present the different practices of making scientific knowledge specifically adapted to the legal context and show how doctors, psychiatrists and other specialists played their part in investigations and trials in Scotland, England, Germany, Spain, Italy, Russia, Portugal, Norway and the Netherlands in the nineteenth and twentieth centuries. These case studies show how forensic practices in modern times were not only shaped by scientific developments, but also – perhaps even more importantly – by major changes in political, legal and cultural contexts, especially by the rise of authoritarian regimes, war crimes and their prosecution, and shifting ideas on nation, class and gender. In this introduction, I will explore new insights in the history of forensic science and address how the chapters in this volume both complement this history and point to new avenues in the research on forensic culture.

The turns to practice and culture in the historiography of forensic science

For a long time, the history of forensic science and medicine was mostly written by historians of law and historians of medicine. Legal historians were concerned with deciphering intricate contemporary discussions between legal scholars about what constituted evidence and who could act as (expert) witness. Historians of medicine explored the application of medical knowledge in physicians' court testimonies. In the first historical narratives of legal or

forensic medicine, these two elements – the formations of procedural law regarding evidence and the role of expert witnesses in particular legal systems and countries on the one hand, and the role of medicine in trials and police investigations on the other – formed the basis of a generally progressivist story, in which scientists as expert witnesses gained more authority in the courtroom and legal procedures, supposedly, became more rational. Hallmarks on this road to modern forensic expertise were the advance of medicine, science and technology, specifically the medieval discovery of autopsy, the development of new technologies such as fingerprinting and blood tests as part of the new scientific branch of criminalistics in the early twentieth century, the use of DNA in court cases from the 1990s, but also the emergence of a whole new field of (forensic) psychiatry from the nineteenth century onwards.¹

The entanglement of the histories of law, medicine and science already made the writing of forensic history complicated. New theoretical perspectives in the humanities and social sciences added layers of analysis and thus also new themes to be scrutinised. Of these theoretical perspectives, two had an especially noticeable impact on the study of forensic history: firstly, new approaches in the history of science, informed by insights from Science and Technology Studies (STS) and a turn to the history of knowledge; secondly, the cultural turn in the humanities.

From the 1970s STS brought a new focus on science in action and the social embedding of the use of technology. As part of a broader practice turn, Bruno Latour, Sheila Jasanoff and numerous other scholars unpacked how science was made in everyday practices and in specific contexts such as the laboratory and the courtroom.² Objects and technologies, especially the ways these were socially embedded, were central to this approach. Moreover, expertise came to be regarded as socially constructed: what type of knowledge was seen as expert knowledge depended on the institutional and cultural setting and was continuously shifting. At the same time, historians of science were increasingly taking account of the social and cultural contexts in which science was produced, as well as of the varying boundaries between expert and lay knowledge.³ For example, Lorraine Daston and Peter Galison famously showed how the notion of objectivity was differently defined between the mid-eighteenth and early twentieth centuries.⁴

Moreover, the cultural turn in the humanities in the 1980s and 1990s highlighted semiotics, the power of discourse, symbols, texts, images and media through which meaning was made. From this perspective, the production and performance of class, race and gender identities gained centre stage. The role of ordinary people had already been stressed in the 1970s, as part of socio-economic history and historical anthropology, but influenced by the cultural turn, historians now became interested in how these people contributed to making knowledge and the ways they were excluded (via medical or psychiatric discourses on normality, for instance).⁵ A new attention to performances was also part of the cultural turn, triggering interest into the performance of experts.⁶

These two new approaches – STS and the cultural turn – have in recent years also impacted on the directions the history of forensic science and medicine has taken. More attention has been paid to experts' performances in the courtroom, to medical and psychiatric discourses on gender, race or the body, to the role of the media in reporting on court cases and scientific experts, to the spaces in which knowledge was made (e.g. the crime scene, the media, the laboratory) and to the various actors, including non-human actors such as objects or animals, involved in this process. In 2013 a special issue of the journal *Studies in History and Philosophy of Biological and Biomedical Sciences* was devoted to the notion of 'forensic culture'. In this issue, Christopher Hamlin took 'forensic culture' to be the 'history of forensic science in terms of ideologies and institutions rather than developing technique',⁷ thus contrasting this new approach with a more traditional focus on a progressivist history of science and technology. Hamlin presented an 'analytic' for comparing forensic cultures, including four elements: exemplary forensic methods and techniques; foremost forensic professions (varying from midwives to chemists); dominant juridical institutions (e.g. inquisitorial, adversarial and the 'colonial rule of incomprehensible others'); and prevailing anxieties. In the same issue, Simon Cole qualified the notion of forensic culture as a flexible one 'to mean a variety of things ranging from race and ethnicity to cultural (or media) representations of forensic science to the impact of forensic science on popular culture'.⁸ These two articles by Hamlin and Cole, scholars who have been central to defining the field of the history of forensic science and medicine,

both indicate the novelty of a focus on forensic culture and the difficulty of defining this notion.

Two recent edited volumes testify to the increasing influence of this paradigm of forensic culture. The first book was edited by Ian Burney and Christopher Hamlin: *Global Forensic Cultures: Making Fact and Justice in the Modern Era* (2019). Its chapters discussed forensic institutions and practices in several countries and regions (Germany, France, Spain, the British empire, Palestine, Siam/Thailand, the United States) even though the volume as a whole did not aim to trace global or transnational knowledge formations. The book featured ‘the entanglement of techniques, professions, and systems of jurisprudence/governmentality’ in regard to forensic science and medicine (not addressing forensic psychiatry) and acknowledged race or ethnicity as ‘differentiator of forensic practices’.⁹ In addition, in his introduction to the volume Hamlin reflected on what exactly was ‘cultural’ when locating forensic practices: ‘we find them everywhere rooted in what is unambiguously cultural: with ideas of what kinds of persons the world includes; of what dangers it and they pose; and, at an even deeper level, of why things happen.’¹⁰

The second recent volume considering forensic cultures is the one edited by Alison Adam, *Crime and the Construction of Forensic Objectivity from 1850* (2020). Rather than the notion of forensic culture per se, the central concept in this volume is ‘forensic objectivity’, regarded as ‘a kind of emergent property, developing from professional practices and media commentary, systems of representation of crimes and crime artefacts’.¹¹ The book ‘decentres’ the professional expert, instead focusing on how forensic objectivity is constructed through ‘a web of interests’, e.g. via ‘the vectors of criminal, victim, class, gender, place, crime scene, experts, media and the public woven together in the performance of forensic objectivity’.¹² Concretely, the chapters in this book cover practices of representation from the mid-nineteenth century to the present day, such as crime photography, the techniques through which jurors could be made ‘virtual witnesses’, the professional networks of medical and scientific witnesses, the role of the media and the ways criminal records were recorded and developed.¹³

Comparing these two recent edited volumes, it can be concluded that *Global Forensic Cultures* highlights experts, governance and

institutions somewhat more than *Crime and the Construction of Forensic Objectivity from 1850*, which revolves around cultural representations and conceptualisations of objectivity. However, both volumes have one important claim in common: forensics are shaped by local circumstances. Hamlin identified as one common theme in *Global Forensic Cultures* that the chapters regarded forensic science as ‘a fabric of contingencies’¹⁴ and Adam downplayed the image of ‘warring experts’, arguing for a ‘more subtle and more complex’ construction of forensic objectivity, including attention for differing institutional arrangements and state support: ‘Local, contingent arrangements do more than influence the trajectory of knowledge; they make it.’¹⁵ By highlighting local conditions and contingencies, both volumes also underscore that technologies, institutions and ideas are entangled.

This overall foregrounding of local differences between forensic cultures has been illuminating since it has shown that technology or legal systems alone cannot explain the daily functioning of forensic experts. It has also provided us with interesting questions to explore: How do the different elements of forensic cultures (such as the availability of technology, the legal system, politics or the media) influence the impact of scientific expertise? And how do expert performances relate to different spaces and audiences, to specific crimes and to historically and culturally variable norms on class, race or gender? If local circumstances play such an important role in shaping forensics, what impact did national, global and transnational knowledge exchanges have on the development of these local practices? And what are the specific hallmarks of *modern* forensic cultures?¹⁶

The chapters in this volume point to some directions the answers to these questions could take. Overall, this book has three aims. Firstly, it highlights the concept of modernity¹⁷ and its ramifications on forensic culture. Recent research has started to pay more attention to forensics in the twentieth century, the period that has witnessed major changes in regard to science, politics and culture. Historians of science and medicine have looked for the modern character of forensic cultures as expressed in the institutionalisation, technologies and social impact of science; in the political development of totalitarian and democratic regimes and disciplinary power; and in changing cultural norms and roles, for instance

with regard to gender, epistemic values and the role of the media. The chapters in this volume provide reflection on these particularly modern hallmarks, as well as on the ways they coexist with older, unchanging, elements. This can help us grasp the conceptions of modernity and how these ideas corresponded with the experiences of the actors who enacted these ‘modern’ forensic practices.

Secondly, this volume highlights the importance of forensic *practices*, in contrast to forensic institutions or scientific discourses. Following the practice turn in the humanities and social sciences, several of the chapters demonstrate that practices have their own powerful dynamics and inform discourses and institutions, as well as being influenced by the latter. A focus on practice can, in fact, inform us on the entanglements of scientific and political discourses, the legal system and other institutions, as well as enactments of gender, nation or class. The agency and interactions central to forensic practices also help us to understand how forensic cultures can change over time.

Thirdly, the chapters in this book explore the notion of ‘forensic culture’ in more detail, for instance in regard to the units of analysis that are used: whereas earlier research mostly took the type of legal system (inquisitorial/accusatorial) or nation as a unit of analysis, increasingly more local systems of knowledge, or at the opposite end, global networks, are beginning to be studied. A more specific explanation of this notion can aid us in comparing different forensic cultures.

The notion of ‘forensic culture’

Most scholars agree that the notion of ‘forensic culture’ may help us to go beyond the perspective of institutional rules and scientific discourse, towards a study of the practices of forensic medicine. More problematic, however, is defining what a forensic culture further entails. Important elements, in addition to technology and the professionalisation of experts, may include ideology (political ideology, but also ideas on religion, class, race and gender), the role of the media, legal systems and the formulation of criminal and procedural law. We need to ask how these factors are practically enacted and mutually entangled. Also, are the boundaries of a

forensic culture national or do they correspond to other geographical or cultural units such as (former) colonial empires exchanging knowledge between metropole and colonies? Or should we rather regard these boundaries as determined by the distinction between accusatorial or inquisitorial systems?

Historical research has provided some robust evidence that has helped us to understand how forensic cultures function. It is increasingly becoming clear that the division between accusatorial and inquisitorial systems does not have such an unequivocal, unilateral relationship with the role and impact of scientific experts as assumed in the literature that has been limited to the ways legal systems function in theory. For instance, the American and English legal systems, based on common law, a jury and two parties as opponents (the accusatorial or adversarial system) is often contrasted with inquisitorial systems based on Roman law, in which the judge leads the examination. Legal historians regard these differences as having resulted in a flourishing discipline of forensic science in Scotland and the European Continent, and in a failing profession in the Anglo-American world from the eighteenth century onwards. They have suggested that the accusatorial system, in which each party hires its own expert, is detrimental to scientific expertise, each expert fighting the other. Controversy regarding scientific evidence is thought to be less frequent in the continental law systems than in adversarial systems.¹⁸ Although undoubtedly the type of legal system shapes the role and impact of forensic science to some extent, in practice many legal systems combine elements of the inquisitorial and adversarial systems. Moreover, in modern history several countries have witnessed changes in their judicial systems. In addition, as the chapters in this volume show, ideology and national political culture – consensual, authoritarian, liberal or conservative – frequently shape the impact of forensic experts equally, if not more, than the broad difference between inquisitorial and adversarial systems.

Thus, it seems convenient to speak of a ‘legal system’ as more than accusatorial or inquisitorial: it entails institutions, often steered by the state, and rules such as procedural law. These may differ per country, state or region. These important building blocks, are, however, not sufficient to qualify as a specific forensic culture. This qualification also needs to include political and cultural ideology as

well as social contexts, that – in turn – influence science and knowledge, and vice versa. Thus, we might speak of the ‘formal role of forensic doctors in the Spanish legal system’, but this is only shaped in the ‘Francoist forensic culture’, characterised by a certain political, social and ideological context. The chapters in this volume indeed show how in Europe national ideologies and contexts strongly impact the form of forensic cultures.

At the same time, it is no longer self-evident to take the national framework as the main unit of analysis. For instance, recent research has established that often the colonies acted as a laboratory for experimenting with new forensic techniques before they were implemented in the motherland, partly in response to specific cultural circumstances or anxieties.¹⁹ This has made us aware that not all forensic technological or organisational innovation took place in the context of the nation, but also in the context of empire. However, this expansion of the unit of analysis beyond the nation state has also raised questions about the exact entanglement of global forensic cultures. Even though authors widely acknowledge that forensic-medical texts were circulated internationally, hardly any research has been done into the international networks of forensic scientists, their exchange of knowledge or their animosities. Furthermore, more structural comparative analysis of forensic cultures in different regions, countries and localities still needs to be performed. The chapters in this volume present one step in this direction by comparing different forensic cultures in Europe in the modern period. They highlight that *within* Europe, as well, there were centres and peripheries, presumed forerunners and stragglers, sometimes framed in discourses on civilisation and backwardness.

Modernity and the ‘forensic turn’: a shift to material evidence?

This book aims to explore the modern character of forensic science, medicine and psychiatry. Primarily, the increasingly advanced technology and the expanding institutionalisation have been regarded as the hallmarks of modern forensics. Specifically, the rise of criminalistics in the first decades of the twentieth century, revolving around material trace evidence – the so-called ‘silent

witnesses' – such as fingerprints, the discovery of hair and blood analysis by the mid-twentieth century and the use of DNA as evidence from around 1990 stand out as technological innovations. In their study of England in the first half of the twentieth century, Ian Burney and Neil Pemberton trace a new forensic regime, which saw the rise of criminalistics, centring around the meticulous analysis of traces on the crime scene and the corpse in the laboratory. This regime replaced an older forensic regime that revolved around the pathologist who examined the victim's body and performed the autopsy.²⁰ At the same time, national discussions on the development of forensic science often revolved around a comparison with other countries that were showcased as more advanced in terms of technology or organisation and institutionalisation. Especially Germany, France and Austria were presented as innovative and having taken the lead in forensic science and psychiatry around 1900 (after the Second World War the United States would become the point of reference).²¹ Ironically, in her chapter in this volume Heather Wolffram writes that in Germany, by the second decade of the twentieth century criminologists and jurists complained that – in contrast to other countries – German universities rarely offered lectures on forensic psychology, criminalistics, forensic chemistry and other scientific aids to legal praxis. These German advocates of innovation thus practised what Wolffram terms 'forensic patriotism', encouraging Germany to catch up with the leading countries regarding teaching forensic science. Although in some cases these comparative images of forerunners and backward countries may have been a correct reflection of the state of criminalistics, they probably mostly served to stimulate governmental funding to establish national forensic institutes and education on forensic science in addition to creating a modern professional self-image and reflecting nationalism.

Progressivist narratives of the march of forensic science have been challenged in other respects as well. Research has traced the rising significance of forensic anthropologists and pathologists in the reconstructions of mass violence and their role as expert witnesses in courts of international criminal and human rights, accompanied by an emphasis on material evidence, bodies and objects, particularly in relation to the Holocaust and concentration camps. This has been coined the 'forensic turn', which supposedly

ended the 'era of witness', the prominent value put on the testimony of human eyewitnesses. The Eichmann trial in 1961 is considered as heralding the age of the witness or the turn towards testimony as the basis for prosecuting and possibly healing crimes against humanity. The identification of the bodily remains of Mengele in 1985, by contrast, and in particular the use of different scientific techniques, is seen to exemplify the turn towards material evidence, bodies and objects. Thomas Keenan and Eyal Weizman argue that forensic investigation is also a stage of public persuasion, using 'scientific, rhetorical, theatrical and visual mechanisms' to make things appear to speak for themselves to convince a non-specialist audience.²² However, the chronology of this shift from the era of witness to the era of forensics has been complicated.²³ As Taline Garibian points out in her chapter in this volume, the evidentiary paradigms of testimonies and forensics often overlap, moreover this opposition was already thematised before the 1960s. While the Americans mostly used documents, British war crime trials relied on testimonies, hence testifying to the coexistence of different judicial cultures at the same time. Garibian furthermore shows that the forensic turn occurring in the 1980s was characterised more by a shift in the evidential paradigm – and the popularisation of specific techniques – than by scientific advances.

Other chapters in this volume also complicate a narrative that describes a complete shift from the use of eyewitnesses and an emphasis on confessions to value attached to expert testimony and material evidence. On the one hand Heather Wolffram's chapter confirms this shift for the forensic culture of Imperial Germany, which came to attach more value to expert testimony and physical evidence left at crime scenes than to confessions and witnesses. On the other hand, Lara Bergers, in her chapter on cases of sexual assault in the Netherlands in 1930–1960, finds a continuing emphasis placed on witnesses and a remarkable neglect of material evidence and expertise. Thus, the relative valuation of witnesses, experts and the so-called material 'silent witnesses' as evidence reveals both change and continuity.

In other respects, as well, continuities can be found in the history of forensic science. For example, medico-legal structures have particularly since the early modern period been inextricably connected with the state and political ideology.²⁴ This comes to

the fore in the coroner system, which in the United Kingdom has been present since the Middle Ages. Although differences exist on national, state and local level, the coroner in Anglo-American countries is generally a state officer tasked with the public investigation of sudden or unnatural death, in contrast to the Continent, where police or judiciary only decide which suspicious deaths will be subject to medico-legal investigation. The function of the coroner was, moreover, regarded as a ‘bulwark of democracy’ in England. The English appreciated the practice of public enquiry of judicial decisions through an elected coroner, including a lay jury.²⁵ The coroner system thus not only exemplifies a medico-legal structure with a long and venerable history, but also testifies to the entanglement of science, law and politics.

The history of forensic science and medicine, which came to be more separated in the twentieth century, has therefore testified to continuities, for example in regard to procedural law, but also to ruptures such as new institutions and techniques. The introduction and acceptance of modern forensic techniques has moreover not been straightforward and has differed per country, depending on the legal system and a broader cultural and political context.²⁶

Modern forensic cultures and authoritarian regimes

A particular hallmark of twentieth-century European forensic culture is the influence of state ideology in authoritarian regimes on forensic medicine. Research on the functioning of forensic medicine and psychiatry in authoritarian systems has demonstrated how the role of these experts could be strongly restricted. An infamous example is the abuse of Russian and Soviet (forensic) psychiatry for political purposes.²⁷ Still, historians have warned that state ideology in authoritarian countries such as Soviet Russia was not the only factor defining the shape of laws and forensic expertise; legal and medical professionals also participated in this process.²⁸

Several chapters in this volume engage with these debates. Franco Orlandi places his chapter on the influence of criminal anthropology in the courtroom in Liberal and Fascist Italy (1910–1930) in a broader discussion on the legitimising role of criminology in the repression and systematic elimination of alleged enemies of the

state in authoritarian regimes.²⁹ According to Mary Gibson, the Lombrosian school contributed to ‘an intellectual environment conducive to the dictatorship’ in Fascist Italy.³⁰ However, both Gibson and Orlandi conclude that the ideas of Cesare Lombroso on the ‘born criminal’ were not appreciated when expressed in court by medical expert witnesses during the Fascist dictatorship in the 1920s. Similarly, Volha Parfenchyk and Willemijn Ruberg, who compare (Soviet) Russian and Dutch ‘crimes of passion’, demonstrate that although the Russian and Soviet criminal codes were suffused with socialist ideology, in practice legal actors and psychiatrists could participate in shaping central notions such as ‘pathological jealousy’ and ‘unaccountability’. A focus on forensic *practices* can thus prove that authoritarian systems need not completely steer the role and conclusions of scientific experts. Nevertheless, as Sara Serrano Martínez argues in her chapter on Spanish medical experts in infanticide cases during the Franco regime, even in trials that at first sight do not seem to deal with politics directly, doctors could also act as ‘crucial agents of Francoist justice’. Whereas historians of Francoist forensic practices have mostly been preoccupied with scientific practices and theories in military trials and in the so-called special jurisdictions for political repression, Serrano Martínez calls for attention to how physicians in ordinary jurisdictions, such as criminal law courts, as well, could contribute to repression. In short, several chapters in this volume propose that authoritarian regimes shape modern forensic cultures, but sometimes in unexpected ways.

Modern epistemic values, gender and the media

The entanglements of power, culture and science also come to the fore in other historical studies of forensic expertise. Foucauldian approaches have, for instance, highlighted how a modern form of disciplinary power targeted at the body took shape from the nineteenth century, in which law, medicine and psychiatry became inextricably connected, together giving rise to a discourse on criminal bodies and personalities.³¹ Not only the bodies of criminals could be the target of disciplinary power, the embodied habitus of the expert was also moulded according to certain professional and

cultural expectations. Here the concept of ‘epistemic virtues’ may be applied. Recent research on epistemic virtues has highlighted the importance of modern scientific values, for instance, objectivity and impartiality. Corinna Kruze has remarked that contemporary forensic culture has become increasingly probabilistic, in the face of acknowledgement of the inherent uncertainty of materials or technologies. Probabilistic reasoning and representation facilitate standardisation and the exchangeability of experts, thus also encouraging impartiality.³² Overall, trust in experts is regarded as a principal hallmark of modern societies.³³ These epistemic values were also strategically appealed to in the modern courtroom. Stephanie Wright has, for example, shown how in sexual assault cases in Francoist Spain the prestige of modernity and objectivity surrounding medical evidence was strategically used by both the defence and victims, who regarded medical evidence as a potential shield against the notoriously arbitrary nature of the Francoist justice system.³⁴ And Pauline Dirven in her chapter in this volume describes how English forensic experts by means of wearing sober suits literally fashioned themselves as impartial, credible personae. Thus, she explores how epistemic virtues are fused with ideals of masculinity.

Dirven’s work also demonstrates that cultural ideas and practices relating to the body and gender have undergone vast changes in the twentieth century, related to the rise of feminism, the sexual revolution, and the disciplining and mediatisation of bodies. These deserve to be further explored in historical research on forensic cultures. For example, the increasing participation of women in the police force, as lawyers, but also as forensic doctors, pathologists, chemists, psychiatrists and psychologists has so far hardly been addressed. Recent research has examined the relationship between forensic science and medicine and gender images in court cases,³⁵ but this focus can be extended to other types of cases. In her chapter in this volume, for instance, Alison Adam discusses the role of blood group evidence in a Scottish paternity case in 1957–1958, arguing that the rejection of the scientific evidence can be explained by considering the wider socio-cultural context of divorce, illegitimacy and the role of mothers in mid-twentieth century Britain, in addition to the mother’s perceived unreliability as a witness.

The power of images is often played out in the media. Media reporting on crime and forensics have recently become themes in research on the history of modern forensic science.³⁶ The term ‘CSI effect’ started to appear in the US media in 2002, shortly after the TV series *CSI* was first broadcast. It refers to the concern that the jury members would expect more scientific evidence, as presented in the series, and hence have too high expectations of forensic expertise, which in turn might lead to unjustified acquittals. In his chapter to this volume, Filipe Santos explores the representation of forensic science and technology in Portuguese media, both tabloid and quality press. Santos found two dominant types of discourse regarding DNA technologies in specific: a more popular discourse celebrating DNA technology as ‘truth machine’ assisting justice, and a more critical discourse in quality newspapers that scrutinises actual forensic practices and resources. Again, we see that the reception of forensic science depends on a cultural context, which in modern times is shaped to a large extent by the media. Santos moreover underlines how the Portuguese projection of more sophisticated forensic techniques and scientific methods onto the United States by means of *CSI*, exemplifies the ‘cultural effectiveness’ of the imagination of a centre-periphery relationship in the media.

Practical dynamics and historical transformations of forensic cultures

The chapters in this volume engage with the above-mentioned elements of modern forensic culture: advanced technology and institutionalisation, but more importantly, novel epistemic virtues like objectivity, the impact of authoritarian regimes on forensic practices, gender images and the increasing importance of modern media in the representation of forensic science. Moreover, the chapters explore the relationship between the formal elements of forensic cultures and their practices, as well as their development.

The notion of forensic culture not only refers to a static culture, but also triggers questions about how a forensic culture changes and how forensic knowledge is transferred between different national or cultural contexts. In her chapter on Imperial Germany

Heather Wolffram traces the attempts to reform the curriculum of legal education (practitioners of criminal law) to include more attention to science, particularly criminalistics, in all parts of the criminal justice process, including investigation and prosecution. Wolffram prefers the notion of ‘forensic culture’ over ‘forensic regime’, since she regards the latter as limited to (attitudes towards) concrete forensic work in the mortuary or laboratory, whereas the former concept has an eye for ‘all those ideas and values in circulation about the problem of crime and its investigation, not just among investigators, pathologists and scientists, but also among others involved in the criminal justice process as well as the public’. Applying this conception of forensic culture, Wolffram argues that in Imperial Germany the increasing use of expert witnesses and testimony of material evidence replaced a forensic culture in which judicial truth-finding was bound tightly by formal rules of evidence and dependent on confessions and witnesses. These innovative criminal justice practitioners sought to share forensic knowledge nationally, but also drew inspiration from foreign institutional models and practices, using the latter to encourage systematic change by appealing to patriotic anxieties of Germany lagging behind in comparison to other countries. This case study demonstrates that transitions to newer forensic cultures can take time and may be frustrated by state institutions and by debate over which professionals should lead the transition. Localised initiatives, for instance short instructional courses, can be the start of attempts at systematic innovation.

That it may take many years to change a forensic culture is demonstrated in Franco Orlandi’s chapter on criminal anthropologists as expert witnesses in the Italian courtroom during the Liberal and Fascist regime (1910–1930). Criminal anthropologists such as Mario Carrara carried the legacy of the now infamous Cesare Lombroso (1835–1909) and still followed his theories. Carrara’s 1940 *Handbook of Forensic Medicine* continued to stress Lombroso’s link between body and criminal behaviour. Partially contradicting previous historians’ claims that the Fascist regime used criminal anthropology to repress deviance by adopting its scientific racism, Orlandi argues that the Fascist judiciary was not necessarily benevolent towards Lombrosian medical witnesses. Perhaps more importantly, Orlandi shows that the theory of a

forensic culture can contrast with its practice: Carrara was reluctant to employ explicitly Lombrosian language and methods in his psychiatric evaluations since he was aware that Lombroso's ideas had lost their scientific reputation in the interwar period.

The contrast between forensic theory and its practice in the courtroom is addressed in other chapters as well. Volha Parfenchyk and Willemijn Ruberg compare forensic cultures in (Soviet) Russia and the Netherlands in the twentieth century in regard to 'crimes of passion' or 'jealousy crimes'. Using cultural historian Rebekka Habermas's method of 'doing law', which entails looking at justice as a 'process of negotiation involving many participants rather than a process of assignment', the authors aim to show that the nature of the 'crime of passion' was continually debated and negotiated by multiple actors: the legislature, the judiciary and psychiatrists. In their cross-cultural comparison, Parfenchyk and Ruberg conclude that both in Russia and the Netherlands the cultural discourse of 'crimes of passion' revolved around 'othering': these crimes were seen as typical of other countries or classes, thus confirming a certain self-image. The Soviet socialist discourse framed 'capitalist' jealousy as its opposite and the 'moderate' and 'rational' Dutch contrasted themselves with the passionate French and Italians who were seen as more lenient towards perpetrators trying to uphold their honour. In both countries perpetrators of this crime were regarded as backwards. However, legal practice did not always correspond to this cultural-political imagery, and sometimes even contradicted it.

That forensic practices can have their own dynamics comes to the fore in the chapter by Lara Bergers too. Bergers contrasts forensic medical practice in Dutch cases of sexual assault to medico-legal writings and thereby takes issue with common understandings in the historiography on rape regarding the distrust of the victims' testimonies and the importance of medical expertise. Qualifying the Dutch culture regarding the prosecution of sexual crimes in the period 1930–1960 as 'a culture of testimony', Bergers points to the absence of a jury, the slow professionalisation of defence attorneys and the lack of interest in witness psychology as factors that explain its features, but also warns that these do not automatically hold true for other types of crimes. Importantly, a forensic culture may thus only be functioning as such for specific crimes, not necessarily for a national system of criminal justice.

Bergers' chapter, as well as the chapters by Wolffram and Serrano Martínez, furthermore call for attention to the phase of the pre-trial investigation and to cases that were dismissed by police or prosecutors. While due to a lack of available source material a historical analysis of such cases is challenging, a fuller understanding of forensic culture would benefit from a closer inspection of the mechanisms that underly dismissals. Also, the local police may selectively shape the narrative of a certain crime they encounter, possibly directing the further trajectory of the case, as Santos describes for the Portuguese urban and rural police forces in the period 1995–2010. Santos also remarks how during this initial phase of the investigation, Portuguese media were already highlighting forensic science as an explanatory factor for success or failure, thus moulding the narrative of the crime and potentially influencing the course of justice.

All chapters in this volume underline this entanglement of legal systems, procedural law and cultural images of science, victims and perpetrators. Svein Atle Skålevåg in his chapter highlights how legal systems, procedures and ideas on unaccountability came together in the local organisation of forensic psychiatry in Norway around 1900, arguing that the Norwegian forensic psychiatric culture had evolved towards consensus, both within the psychiatric community and between psychiatrists and lawyers. Skålevåg defines forensic culture as the working relationship between representatives of medicine and law, including everyone who took part in the legal process, both in courts of law and in parliament: lawyers, judges, forensic experts, writers on legal issues and politicians. This working relation was shaped both by inherent features of law and medicine and by more local characteristics in Norway. The criminal procedure, which did not encourage divergent medical opinions to be articulated in court, and the restructuring of forensic psychiatry, which led to the creation of a central commission for forensic medicine that oversaw the practice, produced a consensus-based forensic culture, seeking to generate uniformity of medical judgment.

The Norwegian focus on consensus underlines the importance of (epistemic) values and virtues, which are discussed in several chapters in this volume. Rachel Dixon and Tony Ward trace the prosecution of cases of infanticide in England in *c.* 1725–1945 and in particular the role of medical evidence. As the only authors in

this volume to take a much larger timeframe into consideration, they illustrate how both uncertainty and certainty could be valuable resources for lawyers and the courts. Despite the advances in forensic pathology over this long period, doctors continued to express their uncertainties regarding the evidence. Dixon and Ward point to the context of the adversarial jury trial, to argue that jurors could use this medical uncertainty when they sympathised with the unmarried mother who killed her baby. For defendants it offered a line of defence. Interestingly, Dixon and Ward prove that – at least in cases of infanticide – there was a ‘cautious forensic culture’ that was different from the picture often painted by historians, who sketch uncertainty being produced by experts publicly disagreeing during the adversarial trial.

Whereas in the English infanticide cases the court performance of the medical experts could lead to leniency, the chapter by Sara Serrano Martínez shows that, by contrast, in the first two decades of the Franco regime, in practice Spanish forensic doctors made crucial contributions to the indictment and conviction of women who had committed infanticide, even when this contradicted the ideas and prescriptions expressed in textbooks on forensic medicine. From their medical standpoint, some medical experts framed the death of the baby as ‘lack of care’ – establishing the haemorrhage of the umbilical cord as cause of death – and thus as a criminal act. Serrano Martínez argues that both ideas about motherhood and the particular shape of the Francoist forensic culture allowed for the hypothesis of the umbilical haemorrhage to become typical in cases of suspected infanticide and provided the pretext for many convictions. Both chapters on infanticide thus highlight the (lack of) agency of the forensic experts, and how their findings, as presented in the courtroom or in pre-trial written reports, are also connected to their performance of epistemic values.

Equally or even more important than values such as consensus and certainty, has been the quality of objectivity. In her chapter, Pauline Dirven zooms in on a notion closely related to objectivity, namely that of impartiality. Perhaps surprisingly, Dirven takes as a case study the practice of dress by English forensic experts in 1920–1960 to show that these experts adopted a sober middle-class look, thus enacting a sense of trust and authority and suggesting impartiality. By wearing sober, dark-coloured, three-piece lounge suits

and matching overcoats, they conformed to the modern, masculine, middle-class fashion trend of the 1920s–1950s. Dirven argues that in this way they could convince the jury that they were impartial, objective witnesses, whose testimony could not be ‘bought’ by the prosecution or defence party, a fear that often surfaced in the adversarial system. Thus, Dirven also proposes that historians concentrate more on the practices through which experts fashioned themselves as impartial, credible personae, rather than on how historical actors have shaped forensic evidence as objective knowledge. This focus on the embodiment of epistemic virtues is an important part of the cultural and performative turn that promises to make original contributions to histories of forensic cultures.

Conclusion

To conclude, this book aims to dissect the notion of ‘forensic culture’, showing how the production of forensic knowledge in practice is inextricably connected with ideological and cultural norms, national legal and political institutions, procedural law and local legal, scientific and medical practices. It calls for a more thorough analysis of the connections between science, culture and politics, at the same time as underscoring how the performance of experts is shaped by epistemic virtues and the bodily fashioning of experts’ personae. As I have argued, this volume calls for exploring the notion of ‘forensic culture’ in more detail, particularly in regard to distinguishing features of modernity, while highlighting forensic *practices*.

Future research can hopefully build on the directions taken by the chapters in this volume, but may also delve into new themes. Firstly, studies of forensic culture should broaden the units of analysis: from the nation state to regions as well as international, perhaps global, connections. A truly transnational or global history of forensic practices remains to be written. And although this volume contains several steps towards comparison, we still need more systematic comparative histories of forensic science. This book also underlines the shifting boundaries of forensic cultures at the same time as pointing to the importance of studying the transfer of knowledge. As Wolfram argues in her chapter in this volume,

the interplay of national and international (educational) systems of forensic knowledge and expertise deserves much more attention. Secondly, whereas forensic culture so far has mostly been studied in relation to criminal law, future research should connect this field with forensic cultures surrounding civil law and international criminal and human rights law, including forensic anthropology. In addition, it may excavate how these fields have come to be studied apart from each other and how that relates to discipline formation. Thirdly, a novel adoption of phenomenological approaches may inform us better about what happens in the encounter between forensic doctors and victims or perpetrators.³⁷ In any case, the chapters in this volume point towards the many ways in which science, legal systems, politics and ideas, together with individual people – experts, perpetrators, victims, judges, prosecutors, lawyers, reporters – make up forensic cultures in practice.

Notes

This project has received funding from the European Research Council (ERC) under the European Union's Horizon 2020 research and innovation programme (grant agreement No 770402). I would like to thank Lara Bergers, Anne van Dam, Pauline Dirven, Sara Serrano Martínez and Ido de Haan for their excellent feedback on previous versions of this introduction, and Anne van Dam for also helping with the index to this volume.

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- 12 Adam, 'Crime and the Construction of Forensic Objectivity', p. 5.
- 13 *Ibid.*, p. 3.
- 14 Hamlin, 'Introduction', p. 17.
- 15 Adam, 'Crime and the Construction of Forensic Objectivity', pp. 2–3.
- 16 Neither of the two aforementioned edited volumes reflects on the notion of modernity as a concept that refers to more than a period. Bruno Bertherat, 'Cleaning Out the Mortuary and the Medicolegal Text: Ambroise Tardieu's Modernizing Enterprise', in Burney and Hamlin, *Global Forensic Cultures*, pp. 257–278 discusses 'Tardieu's progression' (p. 271) and focuses on the advancement of forensic medicine, while also placing Tardieu in a social context.
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 - 23 Francesco Mazzucchelli, ‘From the “Era of the Witness” to an Era of Traces Memorialisation as a Process of Iconisation?’ in Zuzanna Dziuban (ed.), *Mapping the ‘Forensic Turn’: Engagements with Materialities of Mass Death in Holocaust Studies and Beyond* (Vienna: New Academic Press, 2017), pp. 169–191; Roma Sendyka, ‘Posthuman Memorialisations, Memorials After the Forensic Turn’, in Dziuban (ed.), *Mapping the ‘Forensic Turn’*, pp. 291–308.
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