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Forensic cultures in historical perspective: Technologies of witness, testimony, judgment (and justice?)

Christopher Hamlin

Department of History, University of Notre Dame, 219 O'Shaughnessy Hall, Notre Dame, IN 46556, USA

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ABSTRACT

This article explores the history of forensic science in terms of ideologies and institutions rather than developing technique. It presents an analytical framework for characterising forensic institutions and practices, past and present. That framework highlights the distinct issues of means of witness, accredited testimony, and the reaching of juridical decisions. The article applies the framework by comparing four forensic 'formations,' (or 'cultures') which have been prominent at various times and places in the western world from the early modern period onward: these are the central European heritage of the Caroline code, a eugenically-oriented forensic enterprise of late nineteenth-century America, the forensic perspective in nineteenth-century British India, and the representation of forensic certainty in contemporary American popular culture. The article concludes with a critique of what seems an increasingly common expectation: that forensic science evolves independently of legal institutions, and can ultimately displace them.

1. Framing forensic history

Notwithstanding their recent notoriety, forensic sciences are underexplored both in legal history and in the history of science, and, even more so, in the interface between. We have been apt to focus on aspects—the revolution in the analysis of trace DNA, or the rise of blood typing, toxicology, or criteria of sanity—at the cost of a big picture.[1] A techniques-oriented retrospection brings serious danger of presentism: so thoroughly has the enterprise been transformed by new methods, that it has been tempting to consider its past largely in terms of their absence. One might ask 'Can there even have been a forensic science before the arrival of modern toxicology?' Or, equally of blood-typing, fingerprinting, polymerase chain reaction, or fly life-cycle schedules. Such is the view of D.P. Lyle, author of *Forensics for Dummies*. Science, at least sophisticated science, is recent, so too must be the forensic science that applies it.[2]

A tracing of terms—'forensic' science or its cognates/synonyms, 'forensic medicine' as well as 'legal medicine' and 'medical jurisprudence' (all, usually, interchangeable), will dispel the illusion of the recency of the enterprise. The two great early bibliographies of C.F. Daniel (1784) and C.F.L. Wildberg (1819) contain from around 2500 to almost 3000 entries.[3] But one may well wonder whether there can be any useful relation between the forensic pretensions of such pre-scientific eras and our own. Perhaps we are merely seeing a continuity of terms. If their referents have been utterly transformed, fixing on terms would be no more helpful than an exclusive focus on the short history of technical precursors. The domains these terms usually embrace are indeed unruly: they refer to

E-mail address: hamlin.1@nd.edu

[1] The exception is the excellent and succinct account in Watson (2011). I shall not attempt to emulate Watson's comprehensive vision, one both temporal and topical, but will use elements of her narrative as foundation to explore further ways of framing the inquiry. For a dated, but exhaustive guide to the literature, see Nemec (1973).

[2] Lyle (2004). Lyle's insinuation is that forensic science is an applied science: the ordinary course of biology, chemistry, physics, etc. spins off techniques useful in forensic investigation. Without challenging that suggestion, we should bear in mind that scientific epistemology emerged in conjunction with forensic problem-solving, a point made in different ways by Sargent (1989, 1997), Shapiro (1991), Poovey (1998), and others. One may see natural philosophy developing in conjunction with or from legal epistemology rather than being belatedly applied to it. This point is made and the literature well reviewed by de Renzi (2002, 2007).

[3] Nemec (1976).

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all intersections of medicine and law, including matters of licensing and malpractice. Here, I seek a middle way to structure comparative inquiry across time and space, one that will avoid both the looseness of the terms and the limits of tunnel vision. I shall focus exclusively on that large division of medical jurisprudence concerned with the application of specialist knowledge and techniques to questions of criminal and civil law that cannot otherwise be answered.

That domain, however, is broader than commonly realised. Still, as Nemec's exhaustive bibliographic work has made clear, a handful of questions have concerned forensic experts across the centuries. Their relative importance has varied greatly, as have the modes in which they are posed, and the criteria and implications of the answers. In form, they range from familiar questions of secret witness—what x did to y when no one was looking—to questions of identity: not only the simple, 'Who is that person?' but, 'Is that a competent person whose mind can make a will or whose body can work, be drafted, or withstand more torture?'; 'Is that a man/woman? virgin?'; 'Was that baby born alive and at full term?'; 'Who are its parents?' Linked to these are broader questions of responsibility and prophylaxis. These may be effectively hypotheticals: 'Could a particular wound cause death?'; 'Is a criminal lunatic now safe?'

In this paper I briefly sketch and contrast four 'forensic cultures', distinct formations for handling such questions: one conspicuous from the mid sixteenth to the late eighteenth century, chiefly in central Europe, but informing in curious ways the quite different common law tradition in England; a second in late nineteenth century America; a third in mid-nineteenth century British India; and the last in contemporary American popular culture. I cannot come close to doing justice to any of them. Instead, I will explore a few exemplary texts with the hope of highlighting some remarkable differences. I wish also to suggest an analytic for comparing forensic cultures, involving four elements, detailed below, relating to techniques, testifiers, legal systems, and prevailing anxieties.[4]

First is the suite of forensic techniques, which are to allow access to events or states of being that go beyond what any ordinary witness perceived or could perceive. These could be the breathalysers, the Marsh test, the security cameras, or the pond for checking the buoyancy of presumed witches, but they also include tests which require no instruments, like the psychiatrist's observing and questioning. Labeling them 'technologies of witness'[5] reminds us that they stand in for the acute and all-penetrating gaze of an imaginary omni-competent observer, animate or inanimate.

Second are the professions recognised to apply and interpret those techniques, what one may call 'technologies of testimony'. Forensic experts have not only been pathologists, toxicologists, and psychiatrists. Originally they were general or town physicians and accredited midwives. They have also been experts on handwriting, card game rules, accountancy, and, of course, bewitchment—but always there has been a lurking problem of what makes an expert both competent and credible.[6] Recent legal controversies about which persons may be accredited experts, and over what domains, can mislead us into imagining that the problem of applying forensic knowledge is invariably one of matching the *best* available knowledge with the questions under consideration. It is more helpful to recognise that societies designate professions in an act of creating authority to deal with disputes otherwise intractable. Often, the exercise of their special art is more procedural than empirical. The arbitrariness of professional domains is often striking. For example, medieval doctors diagnose most disease; priests diagnose leprosy. Midwives dictate on matters of sexual anatomy and behaviour that go well beyond birthing. Licensed general practitioners condemn buildings.[7] Matters must be resolved whether or not there are persons and means competent to resolve them. However incompetent, the general practitioner embodies the power to commit persons to an asylum or declare the validity of testamentary decisions. There must be some widely disseminated functionary to do those things; doctors fit the bill. (If there is doubt, society can require the united opinion of *two* GPs, on the dubious grounds that incompetence squared = authoritative knowledge).[8]

Third are legal institutions, what one may call 'technologies of judgment' (or 'justice', or maybe even, 'truth'). Here there are multiple elements. What must be proved or demonstrated makes a great difference. Are accused persons presumed guilty or innocent? What roles will be played by prosecutors, defence advocates, magistrates or judges, juries, and forensic investigators? Will the latter be a component of a local police, an executive arm of a state prosecutorial authority, an accessory of the court, or an independent agent occasionally called upon? In inquisitorial systems, the expert will likely be a technical adjunct to a judge-investigator. In adversarial legal systems, a forensic assessment will often be a part of advocacy rather than its resolution: it will be expected that an investment in expertise will be met by an equal and opposite investment in counter-expertise.

The appropriate institutionalisation of forensic expertise had become a controversial issue by the mid nineteenth century, and has remained so. The auspices under which evidence is admitted will determine the character of that evidence and the kinds and degrees of expert disagreement. A response to the close linkage of forensic investigation with the prosecution will be a predominantly sceptical approach to forensic evidence by the defence, an asymmetry. I shall suggest below that the status of forensic science within contemporary American jurisprudence is disturbingly ambiguous (though possibly its very ambiguity is a key factor in its popularity). It involves a conflation of high technology, scientific certainty, justice, and a dash of redemption and supreme moral good, with, notwithstanding a few notable exceptions, prosecutorial institutions.

Beyond the structure of institutions of jurisprudence will be the general laws which structure forensic questions. Imagine a scrap between Montagues and Capulets. A central issue in early modern law was disentangling the sequence and seriousness of wounds suffered in such melees. In a *lex talionis*, (source of our 'retaliate'), an approach to law in which the penalty is to mirror the injury as exactly as possible, it made a great deal of difference who caused which wound. Equally, where several combatants had died, questions of inheritance might depend on the order of the deaths. No less important was the distinguishing of fatal from non-fatal wounds and the difficult problem of the contribution of multiple non-fatal wounds to a fatality. 'Cause' may be a tricky matter for metaphysicians; 'responsibility', however, is a matter of law. In early nineteenth-century England, an eternal question acquired transitory prominence: was man or woman responsible for a pregnancy, and, accordingly, for subsequent child support? That the biological answer was 'both' (and required no particular

[4] The comparative study of witch-regulation, common to many cultures, provides a familiar model of their intersection, as well as an important focus of early modern forensic inquiry. Thus, there are techniques for detecting witchery, deployed only by authorised witchfinders, and institutions for defining standards of conviction.

[5] I borrow the term from Dodd (2006).

[6] Renton (1889).

[7] In England, for example, under the Nuisances Removal and Diseases Prevention Act, 1855, 18&19 Vict. c. 121, sections 13, 29.

[8] *Ibid.*, s 29. Thus the Act allows condemnation either on the assertion of an appointed medical officer, who is presumably competent in permissible habitation, or two other licensed medical practitioners. Commitments, likewise, often required the opinion of two practitioners.