
An increasing amount of attention is being paid to forensic identification technologies, especially DNA profiling. This 25-year-old technology is extremely powerful, and its effects on criminal justice, surveillance, privacy, and biological citizenship seem only to be beginning to be felt. Despite this increase in scholarly attention, as Helena Machado and Barbara Prainsack note in their new book *Tracing Technologies*, the scholarly literature tends to be written from the perspective of an omniscient narrator. They note (p. 14) that there is no book on this subject written from the particular perspective of a stakeholder group.

Machado and Prainsack have chosen what might come as a surprising stakeholder group from which to address new developments in forensic identification technologies. Instead of seeking the perspectives of lawyers, judges, jurors, police, forensic scientists, policy-makers, or the general public, they offer the perspective of prison inmates. They acknowledge that it is unusual to ‘treat[] convicts as stake holders’ (p. 160). However, drawing on Science and Technology Studies, they argue that prisoners have ‘professional expertise’ on forensic identification that ought not ‘be subordinated to, or . . . ignored at the cost of, the expertise of other experts’ (p. 160).

This innovative approach to gaining a perspective on new developments in forensic identification technologies was pioneered by Prainsack (with Martin Kitzberger) in an in-depth interview study of Austrian prisoners. The study design was then largely
replicated by Machado (with Felipe Santos and Diana Miranda) in a study of Portuguese prisoners. In *Tracing Technologies*, Machado and Prainsack have combined these data sets, offering a fuller discussion of a variety of ethical, policy, and social issues raised by new developments in forensic identification technologies, as well as a comparative dimension across the two countries. The first two chapters give background on Austria and Portugal respectively. The next five chapters discuss the interview data comparatively. There is a foreword by Troy Duster and an afterword by Robin Williams.

The Austrian and Portuguese prisoners differed in interesting ways that, Machado and Prainsack suggest, reflected national cultures and the contingent histories of the development of forensic identification technologies in the two countries. At the same, they were more similar than different, perhaps speaking to the ‘global imagery of criminal investigation, conveyed by blockbuster television crime series’ (p. 162).

Aside from all being male (p. 12), the prisoners interviewed were a heterogeneous group, in terms of age, race, and class, with diverse opinions, even within the two national populations. Some claimed to be innocent, others admitted their guilt; some considered themselves career criminals, others considered themselves essentially ordinary individuals who had committed criminal acts under contingent circumstance; some held factually erroneous beliefs, others displayed astute understandings of forensic technology; some supported the legal authority of the state, others championed individual resistance to the law; some were essentialists, others held more ‘social’ views of criminal behavior. In short, forensic identification technologies in prisoners’ imaginations were not simple, stable objects, but a messy ‘cultural imaginary’ (p. 17). Despite this heterogeneity and messiness, the authors organize and distill their interview data in order
to characterize general ‘prisoners’ views’ of forensic identification technologies with interesting and provocative results.

Perhaps not surprisingly, the prisoners largely reflect the broader culture’s views of new developments in forensic identification technologies. Like much of the general public, they get a lot of their information about these developments from television. This finding has been read in some quarters as evidence supporting claims about the much-touted ‘CSI effect’. Depending on what is intended by that term, that might mean that prisoners’ have an inflated sense of the power of forensic science or that they use ‘science-focused crime shows’ (p. 70) like the hit American shows CSI as a training films for how to better evade detection in whatever future crimes they plan upon their release from prison. These two ‘CSI effects’ are contradictory, in that the former posits that ‘the public’ has mistaken fictional television for news and believes that forensic science has capabilities that it does not have, whilst the latter posits that prisoners get reliable information about the capabilities of forensic science from fictional science-focused crime shows, thus enabling them to evade those capabilities in future crimes. Machado and Prainsack, however, caution against such simplistic readings of their data as ‘proof’ of the ‘CSI effect’. Some prisoners did make remarks indicating that advances in technology would require them to be more careful about leaving crime scene traces in the future, and Machado and Prainsack do conclude that prisoners did gain some knowledge about forensic science from such television programs. However, in general, prisoners seemed to spend little time in prison considering how to avoid detection in their future crimes, and, when they did, forensic science was ‘not discussed in isolation but instead embedded in thick narratives of the commission and detection of (alleged or actual)
crimes’ (p. 72). Machado and Prainsack argue that prisoners were not as confused about the fictional nature of CSI and similar scripted television programs as the moral entrepreneurs promoting the ‘CSI effect’ would like us to believe (p. 70). Indeed, breathless invocations of the ‘CSI effect’ tend to attribute all knowledge about forensic technology to fictional science-focused crime shows like CSI, failing to account for the fact that some of that knowledge presumably derives from seemingly ‘legitimate’ awareness of *actual* (as opposed to fictional) developments in forensic science that have occurred over the past several decades. Indeed, many of the prisoners interviewed mentioned not only fictional science-focused crime shows, but also non-fictional science documentaries as sources of knowledge about science (pp. 60-62). As Machado and Prainsack remark, ‘not only are there multiple source of information about crime scene work and forensic technologies but there are also diverse ways of making sense [of], and managing, that knowledge’ (p. 72).

Prisoners were as susceptible to claims that DNA profiling is ‘infallible’ as the rest of the general public, and yet, they were also well aware that issues of deliberate evidence planting and contamination could undermine the ultimate veracity of claims that seemed to follow from forensic DNA results. Interestingly, most prisoners were skeptical of the relatively underexplored notion that increased use of forensic identification technologies might deter crime. Of particular interest were the authors’ efforts to solicit prisoners opinions on ethical and policy questions for which the opinions of government officials, or at least supposedly ‘law-abiding’ members of the public, are generally assumed to be more salient. For example, Machado and Prainsack solicited their informants’ opinions on the vexed question of how inclusive DNA databases should be,
and most of their informants gave answers that referenced ethical principles, rather than mere self-interest. Some prisoners favored expansion of DNA databases to enhance criminal investigations. Many were sympathetic to the argument, common among some legal scholars, that expansion of DNA databases would enhance social justice by more equitably sharing the risks of database inclusion among social strata. This was an area in which the comparative dimension of the book showed interesting differences. The notion of a ‘universal’ database was only seriously entertained by the Portuguese prisoners. Perhaps this was because that possibility was briefly discussed—though soon abandoned—in Portugal. Following the brief consideration of a universal database, Portugal’s law on DNA databases ‘eventually transformed into one of the most restrictive laws in Europe in terms of the criteria for DNA profile inclusion and removal for criminal investigation purposes’ (p. 44). On the other hand, none of the Portuguese prisoners evinced any awareness of the universal database proposal (p. 103). Such a proposal was never discussed in Austria, and the Austrian prisoners never spoke of it, despite the fact that the Austrian database is in fact much larger than the Portuguese—indeed among the world’s largest—relative to population (p. 20). Surprisingly, or perhaps not, ‘what most prisoners favored in terms of how comprehensively a national DNA database should be set up and who should be included bore striking resemblance to the status quo in the respective countries’ (p. 103). Another intriguing comparative finding was that Austrian prisoners were virtually all ‘social essentialists’ (p. 105), whereas some Portuguese prisoners were prone to describe criminality as something that inhaled in particular individual’s nature or ‘blood’ (p. 96).

Another provocative finding is that many prisoners viewed enhanced forensic
identification technologies as protective, rather than as enhanced surveillance tools in the
service of the police. Here they were referring to the potential use of DNA technology to
exculpate (pre-trial) or exonerate (post-trial) them for crimes of which they might be
accused but not have committed. While this might seem a strange attitude on the part of
convicted prisoners, some of the interview subjects claimed that forensic DNA profiling
had exculpated them of other crimes for which they were accused, in addition to the
one(s) for which they had been convicted. Others had been convicted in cases in which
forensic DNA profiling had not been used, and they believed that such testing would
have exculpated them. The interviews also corroborated social scientists’ finding that
forensic evidence has enormous power to leverage confessions from suspects. Some
prisoners felt that criminal suspects were in safer hands with forensic science than with
traditional police tactics like interviewing. The interviews thus speak in interesting ways
to the vexing question of whether criminal suspects are ‘better off’ with more forensic
science.

*Tracing Technologies* makes a valuable contribution to the scholarly discourse on
forensic identification technologies through its adoption of a stakeholder perspective—
and a rather unexpected stakeholder group at that—and its comparative perspective.
Ultimately, *Tracing Technologies* supports the notion that forensic identification
technologies are not simple, stable cultural objects for the social groups that act upon, or
are acted upon by, them. Instead, *Tracing Technologies* shows that forensic identification
technologies exist as a messy ‘cultural imaginary’ (p. 17) even for one of the social
groups to whom they would seem to matter most.

Simon A. Cole