

## Book Review

### **Genetic Policing: The Use of DNA in Criminal Investigations**

**Robin Williams & Paul Johnson**

**Willan Publishing 2008**

### **Genetic Suspects: Global Governance of Forensic DNA Profiling and Databasing**

**Richard Hindmarsh & Barbara Prainsack (eds.)**

**Cambridge University Press 2010**

DAVID WYATT<sup>1</sup>

These complementary volumes concentrate on the historic emergence and current processes surrounding the forensic use of DNA in profiling and databasing. *Genetic Policing* and *Genetic Suspects* make significant contributions to the existing literature on local and global practices of using genetic science in law enforcement. Each volume considers the social, technological and historical emergence of forensic DNA profiling and databasing and provides practical advice on how future usage could, and potentially should, be shaped. Painting complex pictures of the interplay between actors, technological developments and processes of power, they show that the way DNA is currently used in law enforcement was not inevitable. While *Genetic Policing* concentrates on police practices, *Genetic Suspects* concerns the governance of the use of these technologies.

Williams and Johnson's *Genetic Policing* is a systematic discussion of how DNA is understood and applied in criminal investigation and identification. This empirically grounded study situates the National DNA Database of England and Wales (NDNAD) in a comprehensive account that examines the operational, legislative and technological developments/trajectories of the last three decades. Drawing on a combination of document analysis and semi-structured interview data, each chapter considers specific issues in intricate detail, seamlessly weaving the many different sources and ideas to provide an informative and rich analysis of the use of DNA in policing, in particular the NDNAD, and its role in 'intelligence-led policing'.

The discussion is placed within extant literature on the historic methods of indexing and individuating certain suspect members of the population, highlighting that the contemporary use of DNA profiling can be seen as just another method through which social order can be maintained by rendering these specific members of the population identifiable. The authors examine the ways in which the credibility and epistemic authority of DNA profiling and DNA intelligence were developed and maintained through the investment of numerous public and private agencies and how, in the UK case, the limited case-specific objections to the use of DNA in court along with the

speed with which any problems were resolved were significant in the development and implementation of the NDNAD.

The possibilities of using DNA outside of databasing are also explored through an examination of the case-by-case deployment of molecular biology in investigating crime (as opposed to convicting perpetrators), covering issues such as the familial search (using partial DNA profile matches to find potential familial relations of an individual whose DNA profile was found at the crime scene and thus generate potential suspects) and the genetic ancestry test (the rather problematic method of using ancestry information contained in DNA to suggest physical characteristics of the assailant, for example, skin colour). The analysis emphasises that rather than being technologically driven, the use of these methods and the developments of new uses for DNA in investigative practices are politically and culturally driven.

The frequent legislative changes that enabled the database to take its current form and current composition are presented, paying specific attention to the interrelationship between scientific and governmental agendas, particularly in relation to a shift in the boundaries of intimacy (i.e. making the mouth a non-intimate sample area) and the changes in the rules that denote who can be sampled, when and the provisions for the retention of these samples. This chapter links well with a later chapter that considers the custodianship and oversight of the operational side of the database.

The inclusion of police performance measures and the more bureaucratic aspects of the use of DNA are covered, along with an examination of the potential futures for the database and the possibilities it opens for new categories of suspects. What is particularly interesting in *Genetic Policing* is the way the shift in the parameters of the 'criminal population' or the potential future criminal population and the dividing line between innocence and guilt are displayed. Williams and Johnson highlight how changes in discourses on criminality and the placement of innocence and guilt within the legal framework of England and Wales, have, to some extent, been redefined through the wider use of DNA in policing. Innocence and guilt are now, in some way, decided at the police station or laboratory rather than in the courtroom.

The speed with which processes change renders a few points from the discussion a little out of date. In particular, the European Court of Human Rights' judgement on the *S and Marper v. the United Kingdom* (2008)<sup>2</sup> case occurred after this book was published. The court decision is significant because it ruled that, in this case, the UK's DNA profile retention practices violate Article 8 (the right to privacy) of the European Convention on Human Rights. This decision led to a Home Office consultation paper (2009)<sup>3</sup> proposing changes to DNA sampling and retention practices. Nevertheless, this neither detracts from the general quality of information and discussion contained in this volume nor the much needed contribution this book makes to the extant literature on the use of genetic knowledge and genetic technologies in police practices.

Hindmarsh and Prainsack's edited collection takes a more global approach to consider the implementation and governance of DNA technologies in police, legislative and courtroom practices. Drawing on a diverse selection of contributors, this volume is divided into two sections. The first covers general issues that are significant in the governance of DNA in law enforcement. These chapters provide a clear background to themes which are examined to some degree in the second section with reference to specific national socio-historical contexts. As in *Genetic Policing*, this focus on the role of socio-historical contexts is highly significant. However, for *Genetic Suspects* this makes it difficult to provide any specific, practical governance advice that is relevant across national borders, (which appears to be one of the volume's aims).

The first section starts with an account by Prainsack of some of the current issues in police DNA databasing. Of particular interest here is the discussion of the *S and Marper v. the United Kingdom* (2008)<sup>4</sup> court decision, unavailable when *Genetic Policing* went to press. Considering the processes using DNA, from the crime scene to the courtroom, Prainsack highlights that using DNA is far from unproblematic and suggests that the limitations and potential of DNA's utility in criminal investigations need to be clearly understood and acknowledged in governance practice.

Two chapters follow exploring DNA mass screenings ('dragnets') – the 'voluntary' collection of DNA samples from specific subsections of the population deemed likely to include the perpetrator, based on geographical location, age, sex and/or race, to generate suspects. The first, by Zadok *et al.*, highlights discrepancies between dragnet practice and lawmaking, calling for dragnets to be clearly used as a tool within, rather than a substitute for, an array of investigative practices with clear guidelines for their use. Through a systematic discussion of the operational, ethical and legislative aspects of using dragnets, Zadok *et al.* contend that better governance is not only required for the use of dragnets but in the police use of DNA in general.

The second, by Washington, discusses racial biases in the police use of DNA, utilising racial dragnets as an example. Highlighting the inefficiency of using race-specific dragnets, the scientifically questionable nature of genetic ancestry tests as a way of denoting skin colour and the importance of governance decisions striking the right balance between public safety and civil liberty concerns, the author calls for race-specific dragnets to be abandoned and for better public education and public involvement in databasing decisions.

Tutton and Levitt's chapter considers forensic and medical databases. Exploring the databases' sociotechnical configurations using the sociology of expectations, politics of legitimation and literature on citizenship, the authors question what we may be able to learn from the similarities and differences between these databases and suggest that as forensic databases expand, there may be greater potential for theorising across these contexts.

The first section ends with Cole and Lynch's contribution which examines the trajectories of the use of fingerprinting and DNA profiling in order to stress the

importance of understanding DNA's use in criminal investigations within the history of other forensic practices. DNA databases are not a distinctly different phenomenon. Although the authors are careful to highlight that the trajectories are not linear, they illuminate how forensic identification techniques have followed similar paths in the past. As such, the experiences obtained and problems presented in previous 'gold standard' identification techniques should not be overlooked in current governance decisions.

The contributions in the second section provide analyses of the above themes by exploring the use of DNA and the establishment of police DNA databases in the UK, Austria, the Netherlands, Norway, Portugal, the USA, Australia, New Zealand and the Philippines. Of particular interest here is not only the inclusion of inquisitorial and adversarial legal systems but also the examination of database design and implementation in a country such as the Philippines, where there is a need to balance the huge costs of putting a DNA database in place and using DNA regularly in police practice against the cost of maintaining and developing the welfare provisions for the country's citizens.

These chapters highlight the significance of the continuous expansion of the parameters of use for DNA and DNA databases in policing (particularly through the idea of the 'function creep') and the important concerns this raises without ignoring the importance of public attitudes to the police use of genetic technologies and to the state in these processes. On the whole, they balance accounts of the technology with the social, operational, legal and regulatory aspects highlighting the place and significance of discourses of speed, efficiency and the common good against wider governance concerns.

Rather than highlighting national differences as the main thrust of each chapter's argument, the similarities between countries and the important role of different actors and agencies in these processes are elevated throughout. This collection demonstrates clearly that there are very similar themes and concerns across the world but very different ways of dealing with them within diverse socio-historical contexts. This point is crystallised by the organisation of the chapters in this volume, particularly in its second part. For example, the significance of public trust in governmental institutions is highlighted by the placement of Dahl's account of the Norwegian case, where public trust is high, alongside Machado and Silva's discussion of the Portuguese database, where low levels of trust between citizen and the state have ramifications for the acceptance and use of DNA databases.

It would be easy for a volume such as this to appear disjointed and although there is an element of rupture between chapters which is unavoidable, the contributions as a whole tie together in terms of themes and content; all chapters strike a balance between the technological elements, legislative frameworks and social factors that play a role in both the development and reception of indexing techniques, without being scientifically dense or littered with jargon.

I was, however, slightly surprised that the practices of sharing database information across national borders was not covered in significant detail. Although mentioned, I expected a more substantial coverage of this issue and the clear ramifications it has for future governance practice. Nevertheless, this does not detract from the volume as a whole.

Read individually or together, *Genetic Policing* and *Genetic Suspects* tease out a number of key themes that are not only relevant to current academic debates but are also significant in general public discussions on the role and parameters of the police use of DNA and genetic technologies. Written in an accessible and lucid style, these books are suitable for a range of readers from policy makers and legal professionals to anyone interested in the contemporary practices of using science in law enforcement.

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<sup>1</sup> Egenis, the ESRC Centre for Genomics in Society, University of Exeter.  
[dmw206@exeter.ac.uk](mailto:dmw206@exeter.ac.uk)

<sup>2</sup> S and Marper v. the United Kingdom (2008). For a summary of this judgement, see:  
<http://cmiskp.echr.coe.int/tkp197/view.asp?action=html&documentId=843937&portal=hbkm&source=externalbydocnumber&table=F69A27FD8FB86142BF01C1166DEA398649> (accessed November 2010)

<sup>3</sup> Home Office (2009) "Keeping the Right People on the DNA Database" available at:  
<http://webarchive.nationalarchives.gov.uk/+/http://www.homeoffice.gov.uk/document/s/cons-2009-dna-database/> (accessed November 2010)

<sup>4</sup> S and Marper v. the United Kingdom (2008). For a summary of this judgement, see:  
<http://cmiskp.echr.coe.int/tkp197/view.asp?action=html&documentId=843937&portal=hbkm&source=externalbydocnumber&table=F69A27FD8FB86142BF01C1166DEA398649> (accessed November 2010)