

Discussion Outcomes

ESRC Research ‘Seminar series on genetics, technology, security and justice. Crossing, contesting and comparing boundaries’

Seminar 3: Comparing the use of DNA in criminal investigations & DVI across European borders

Thu, 14 July 2016, 12:00 – 18:00 and Fri, 15 July, 09:00 – 14:00, Northumbria University, Great Hall, Sutherland Building, College Street, Newcastle upon Tyne, NE1 8ST, UK

This two day seminar focused on the cross-jurisdictional uses of forensic genetic technologies in two closely related contexts: disaster victim identification in cases of mass fatalities, and cross-border criminal investigations. In the first day six talks focused on the first context; in the second day a further five talks focused on the second, whilst a sixth talk supplemented criminal investigation issues with the use of genetic information in efforts to determine family relationships, especially for refugees and others seeking to cross national borders.

The audience for the talks included academic social scientists, professional forensic scientists, and members of UK Government agencies. Participants – both speakers and audience members - came from the UK and several other European states including France, Portugal, The Netherlands, and Germany.

A number of themes emerged over the two day period. Several of these were variants on those that were visible in previous seminars in this series, but some emerged here for the first time. We list them below.

Discussion outcomes

1. **Global Science and Local Practices.** Several presentations focused on new scientific developments in forensic DNA profiling, especially the introduction of ‘DNA 17’ (17 loci) in the UK, and the various possibilities arising from the introduction of Massive Parallel Sequencing as a technology of choice for the medium and longer term future of forensic genetic analysis. It was acknowledged that there existed significant differences in the degree to which different jurisdictions had considered how such innovations would be introduced and how they might affect criminal investigations both within and across national boundaries. It was also asserted that social science studies of both current and developing uses of these technologies remained sparse. Whilst there had been several recent ethnographic studies of forensic science practice in DVI operations, much less work of this kind had been done on criminal investigative practice, and how forensic genetics is used to support such investigations. It was agreed that there was a need to supplement the existing body of administrative criminological work on forensic science utility with fine-grained qualitative studies capable of exploring how forensic science agency is located within the investigative order of both adversarial and inquisitorial criminal justice systems.

2. **Forensic Science and Social Science.** Some presentations emphasised the ambitions of forensic genetics and the ways in which recent developments – for example in statistical programs for mixture deconvolution and in the assessment of contamination – were dealing with the increasing sensitivity of profiling technologies. Other presentations emphasised the political and social imaginations that drove these developments as well as the organisational and social consequences that resulted from them. These differences informed a more general discussion of the relationship between forensic science and social science perspectives, and all who contributed to a discussion of this issue noted that much work needed to be done to make communication between these two groups more collaborative, and thus more productive. It was agreed that further expert meetings devoted to one or several specific problems/issues in the application of forensic genetics was a good way forward.
3. **Forensic care and the limits of DNA identification.** One topic of discussion and reflection considered the role that forensic science, specifically DNA identification, has in the everyday practices of DVI as it faces demands from families of victims looking for exhaustive- if not indefinite identification of every human remain found in the scene of disasters. The discussion placed emphasis on the ethical dimensions and difficult decisions that need to be made in order to recover the identity of certain victims, and the very costly and emotionally draining dimensions that the practice of exhaustive identification entails. In some cases like the post 9/11 identification programme, an exhaustive identification would basically mean a permanent recovery of victim's remains and identification via DNA, in contrast with collective decisions in which not every trace of human remains is to be identified, if the community is to heal and overcome collective trauma. The tensions discussed in the presentations, and further group discussions, did not only tease the ethical and cost-benefit relations of exhaustive identification, but also the systems of beliefs and localised notions of care and dignity that fuel the demands of many relatives of victims of disaster/atrocity that support the exhaustive recovery and identification of human remains.
4. **Forensic Genetics and the Socio-Politics of Identity.** The underlying ambition of forensic genetics – to reliably capture bodily individuality - was discussed against the background of a wider social science interest in aspects of social identity and self-identity. It was suggested that adequate consideration of recent developments in forensic genetics, especially familial searching and forensic DNA phenotyping require us to pay attention to the ways that earlier notions that forensic genetics dealt with only personal identity no longer hold good. Instead, these new technologies require attention to be paid to moral and practical aspects of social and self-identity as they are expressed in assertions of the genetic nature of relationships, appearance, and social groupings.
5. **Oversight, Standards and Trust.** Many presentations noted that criminal jurisdictions vary in how they legislate or regulate the introduction of forensic genetic innovations. This was a theme in earlier seminars, but again participants in this seminar agreed that there was insufficient study of how these mechanisms were designed, what agencies operated them, and how they were operated in practice. In addition, the nature of social and political claims concerning the trustworthiness of forensic genetic technologies was

raised and discusses. It was noted that prior work on science and trust needs to be supplemented in studies of forensic science if only because of the way that courtroom interrogation of scientific truth claims (especially, but not exclusively in adversarial criminal justice systems) deploys longstanding technologies of mistrust in an engagement with expert witnesses.

6. **Inequality, Forensics and Transnational DVI Efforts.** The role that forensic science plays in the identification of victims of disasters often involves citizens from many nationalities, and thus the intervention of a diverse group of experts, technologies and interests. The presenters stressed that many international DVI efforts not only reveal the difficulties of cooperation and organisation between bureaucratic organisms, and the problems arising from the availability and harmonisation of certain technologies, but also the ways in which forensic science reproduces inequality and re-enacts difference not only between the living but between the dead. The negotiations between diverse set of norms, values and ideas that are at stake when there is the need to identify human remains who belong to different nationalities speaks to the topic of global and local practices we mentioned earlier, but also makes it more clear that the unequal treatment of bodies responds to longstanding politics of inclusion and exclusion that respond to national and racial imaginaries. The need to investigate more thoroughly the encounters between different forensic logics during DVI operations, was an interesting topic, that points towards the need to do more research on how inequality is reproduced through the deployment of DVI efforts.