steps will be taken in the UK, and other countries will be inspired by its example.

Acknowledgements

This work was supported by GeneBanC, an EU-FP6 supported STREP contract number 036751.

A Portuguese Perspective

Helena Machado*

Research Centre for the Social Sciences, University of Minho, Instituto de Ciências Sociais, Departamento de Sociologia, Campus de Gualtar, 4710-057 Braga, Portugal E-mail:hmachado@ics.uminho.pt

Susana Silva

Institute of Sociology, University of Oporto, Faculdade de Letras, Via Panorâmica, s/n, 4150-564 Porto, Portugal

doi: 10.1017/S1745855208006017

The Nuffield Report is of considerable interest to professionals working in the criminal justice system, to key stakeholders, and to scholars and students focused on the forensic applications of bioinformation. It provides an innovative and extended approach to a number of controversial issues, especially concerning debates on interpretation and presentation of DNA evidence in court, and questions about the usefulness of DNA databases in crime investigations. Another set of issues highlighted in the report that we find particularly helpful are the recommendations that more empirical evidence detailing the benefits of bioinformation is urgently needed and that expenditure on expert crime scene analysis should be given a higher priority than increasing the collection of subject samples.

Much of the report's robustness stems from the range of perspectives and the diversity of fields

References

Jonas, H. (1985). Das Prinzip Verantwortung. Frankfurt: Suhrkamp.

Van Camp, N., & Dierickx, K. (2007). National forensic DNA databases: Socio-ethical challenges and current practices in the EU. European Ethical-Legal Papers No. 9, Leuven.

presented through the expert contributions: bioethics, law, sociology, cultural geography, human genetics. Yet the treatment of many of the issues raised by the report falls short with regard to the ways they can be applied in contexts other than those of England and Wales, especially in countries that have inquisitorial legal systems, with scarce economic resources and low criminality rates. These kinds of countries may require different frameworks for debating what constitutes a reasonable balance between individual rights concerns and the potential value of the DNA databases for society at large.

Public trust and informed consent

The Nuffield Report emphasizes the importance of fundamental ethical values and human rights (liberty, autonomy, privacy, informed consent and equality) that should be protected and respected. At the heart of many of the report's recommendations are the principles of proportionality and reasonableness. These suggest that the fundamental ethical values and human rights can be restricted in certain, appropriate circumstances-for instance in situations where it would be in the public interest to ensure social order.

The report proposes a rights-based approach to resolve these conflicting interests, but it does not provide clear boundaries for what constitutes appropriate circumstances when it comes to including profiles from volunteers. This is probably because it is believed that the informed consent of individuals of mature age and with full mental capacity can operate as a form of legitimization that removes any -ethical objection based on liberty or autonomy. But this

Helena Machado is a Senior Lecturer in the Department of Sociology, University of Minho, and Deputy Director of the Research Centre for the Social Sciences. Her research interests are primarily in the fields of forensic genetics, technology in courts, and interfaces between the criminal justice system and the mass media. She is currently undertaking research on the social, ethical and political impacts of a DNA database for forensic purposes in Portugal and on the interactions between justice, media and citizens.

Susana Silva is an Associate Researcher at the Institute of Sociology, Faculty of Arts, University of Oporto, and an associate member of the Research Centre for the Social Sciences, University of Minho. She is currently finishing her PhD thesis: 'Doctors, jurists and lay people: The social images of medically assisted reproduction'.

^{*}Corresponding author

relies on the assumption that there is public trust in forensic genetics and in the political and legal institutions, and this trust significantly restricts the public's opportunity to question or criticize it.

Another aspect not fully reflected on in the report regards volunteers who freely give their informed consent to donate genetic material as a sample for the DNA database. Indeed, the notion of 'volunteers' used in the report refers to victims, witnesses or volunteers in mass intelligence screens. Other countries may well have a broader notion of volunteers, such as anyone who wishes to donate a sample. The Portuguese National Council of Ethics for the Life Sciences recommends, for example, in its commentary on the Portuguese draft law for the establishment of a DNA database, that permission to include profiles of volunteers should be made expressly in writing and be revocable at any time. Recent public pronouncements by the Portuguese government have emphasized this as an obvious example of its intention to safeguard the rights and liberties of its citizens. Is this concept of volunteers evidence of the emergence of a new morality that 'obliges, the "good" citizen to provide a sample of his or her body as a gift towards common welfare' (Rose and Novas, 2005: 440)? There is a lack of discussion on how to proceed if a person refuses to collaborate in the construction of a DNA database, which is an important underlying element in such a new morality. In this way, the human rights of liberty, autonomy and privacy can be transformed into a duty to donate biological material and to consent to profile entry. The promotion of an individual sense of responsibility for the maintenance of the social order by donating a biological sample to a DNA database that arguably ensures security may be seen as a novel way of perpetuating the existing distinctions between law-abiding and respectable citizen on the one hand, and suspects on the other (Ploeg, 2002). One may begin by asking how far the promise of security can go; how far citizens will agree to have their rights restricted in the name of common welfare; and how far they will trust the intentions and actions of those who are empowered to collect and use the genetic material for forensic purposes (Williams, Johnson and Martin, 2004). In Portugal, public confidence in the political institutions and in the criminal justice system is comparatively low in European terms.

There are other aspects excluded from the Nuffield Report that might affect fundamental ethical values and human rights in a more subtle way. Take standard practices of informed consent as an example: how do we make the guidelines for providing information compatible with individual requirements, values and expectations? An evaluation of citizens' understandings and interpretations of the information given is crucial to ensure that informed consent is not merely a formal discursive practice, but a real opportunity to humanize and to democratize social relationships. This is especially important because genetic information may have far-reaching repercussions, not only for the individual but also for the immediate and extended family, and because uncertainties about the DNA profile entry and the uses and applications of the information still exist. The Nuffield Report explains this, but it does not emphasize the need to present data on the risks involved in the performance of genetic testing and profiling, without which the consent may be invalid, nor does it consider the constructive nature of risk and its implications for the mobilizations and courses of action by different political agendas and distinct social groups (Lentzos, 2006).

The legal and economic context

The Nuffield Report highlights and expands aspects of forensic use of bioinformation that have not been sufficiently covered by traditional bioethics. The limitations and uncertainties of science have, for instance, not generally been adequately unpacked in the ethical debates. Other aspects include the potential for laboratory and technical errors, the difficulties and issues posed by popular representations of science, the difficulties that may arise in interpreting this type of evidence, and the understanding of DNA evidence by judicial actors. The report makes recommendations that contest some popular perceptions of forensic genetics, such as emphasizing that there should be a minimum level of training in statistics for judicial actors dealing with DNA evidence. It is also recommended that experts should disclose all laboratory results, not just results where a consensus has been reached. A great deal of attention is paid to the difficulties of presenting DNA evidence in trials, and several recommendations are made relating to transparency and non-expert understanding of the capabilities and limitations of DNA evidence.

The questions raised in the Nuffield Report are aimed at providing a framework for debate. It is an analysis that is intended to assist policy-makers and to raise public awareness about forensic DNA profiling. Yet it is almost entirely contextualized within the UK. Despite occasional references to other national contexts-the report mentions the discussion in the French National Consultative Bioethics Committee for Health and Life Sciences as well as that in the German National Ethics Council, and provides an appendix of the opinions of the French National Consultative Committee for Ethics and of the Portuguese Ethical Council for Life Sciences-it does not consider the ways in which the issues may be raised within inquisitorial legal systems. The significance of different legal traditions is only briefly mentioned in relation to the challenges of international cooperation. Genetic technologies in the European continental judicial systems raise additional concerns to those covered in the report. In inquisitorial judicial systems the judge plays a dominant role in the examination process, and in imposing the rules of evidence and court procedures. Often, the judge will perceive genetic expert reports as a type of evidence that is close to an absolute truth, or at least as constituting all that is worth knowing about the trial in question submitting to the 'wonderful' world of science (Jasanoff, 2006). Unlike adversarial legal systems, which rely on the clash of opposing viewpoints before a relatively passive tribunal that then adjudicates, inquisitorial trials actively ask parties for factual truths and expert reports might be perceived as the rational way of going about things (Cooper, 2004).

The economic context and the high financial cost of DNA databases are also under-explored in the report. Instead, the economic cost debate tends to be more focused on the advantages and disadvantages of expanding DNA databases, and on the need to prioritize funding for expert crime analysis and to ensure that full use is made of the material collected. The economic cost debate also serves as an argument for considering the disadvantages of establishing a population-wide database. However, it is also necessary to consider local contexts and the proportionality between the possible benefits of DNA databases and their economic costs in different countries,

and whether the expenditure is warranted for serious yet rare crimes.

To summarize, we argue that further consideration needs to be given to how the advantages and disadvantages of forensic DNA databases, and the balance of individual rights and the public's interest, may vary depending on legal traditions and the social and economic contexts.

Acknowledgements

We are grateful to the foundation for Science and Technology (Portguese Ministry of Science and Technology) for supporting as research.

References

Cooper, S. (2004). Truth and justice, inquiry and advocacy, science and law. Ratio Juris, 17(1), 15-26.

Jasanoff, S. (2006). Just evidence: The limits of science in the legal process. Journal of Law, Medicine and Ethics, 34(2), 328-341.

Lentzos, F. (2006). Rationality, risk and response: A research agenda for biosecurity. BioSocieties, 1(4), 453-464.

Ploeg, I. (2002). Biometrics and the body as information: Normative issues in the sociotechnical coding of the body. In D. Lyon (Ed.), Surveillance as social sorting: Privacy, risk, and automated discrimination, 57-73. New York: Routledge.

Rose, N., & Novas, C. (2005). Biological citizenship. In A. Ong, & S. Collier (Eds.), Global assemblages: Technology, politics, and ethics as anthropological problems, 439-463. Oxford: Blackwell Publishing.

Williams, R., Johnson, P., & Martin, P. (2004). Genetic information and crime investigation: Social, ethical and public policy aspects of the establishment, expansion and police use of the National DNA Database. London. Official Report.

A Norwegian Perspective

Johanne Yttri Dahl

Department of Sociology and Political Science, Norwegian University of Science and Technology (NTNU), NO-7491 Trondheim, Norway E-mail:Johanne.Yttri.Dahl@svt.ntnu.no

doi: 10.1017/S1745855208006029

The Norwegian Minister of Justice and the Police, Knut Storberget, predicts a DNA revolution in Norway (Dagsavisen, 2007). He claims that DNA analysis is one of the most important tools available in the battle against criminality all over the world (Storberget, 2007). A press release from his department notes that no method can outperform DNA analysis, either when it comes to efficiency or credibility, and that it is necessary for the Norwegian police to have

Johanne Yttri Dahl is a research fellow in the Department of Sociology and Political Science at the Norwegian University of Science and Technology. She is currently working on the project 'For Whom the Bell Curves', carrying out a study on forensic DNA databases and the use of DNA evidence in Norway.