

Challenging privacy: Using the National DNA Database to support victims of sexed violence

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Abstract

The National DNA Database raises controversial issues over privacy, consent, human rights, crime prevention and control. Taking these themes as guides, I will develop a critical discussion on the issue of sexed violence to exemplify how the law has failed to provide sanction for victims of this crime due to hegemonic masculinity. Campaigning groups for Violence Against Women call for more robust case-building in cases of sexed violence where DNA forensic evidence is crucial. The HM Inspectorate of Constabulary's recent report 'Without Consent' highlights the low conviction rate for rape suggesting that this section of the criminal justice system is in a state of crisis. I will argue that it is necessary to utilise and develop the database as a tool for improved conviction rates and a possible reduction in incidence, through the power of detection and deterrence. However various human rights groups object to the existence and development of the database on grounds of privacy. I will challenge this notion of privacy and suggest that civil rights are founded through perceived threats and fear. Furthermore I will problematise whether there is a modern concept of privacy as masculinist that is employed by some human rights discourse. This concept of privacy operates a patriarchal hegemonic discourse to oppose women's justice by keeping active criminals protected from investigation, therefore objections to the database on this basis should be contested in order to allow and accept DNA databasing as a crime control method against sexed violence. A compromise is necessary between operation and regulation. I will ask whether the database is only a small infringement on the rights of citizens for the assurance of improved detection, crime reduction and justice within today's society.

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‘Nothing great in the world has ever been accomplished without passion’
Hegel, G. (1770-1831)

Introduction

DNA profiling² has led to the most successful method of human identification since fingerprinting³. 'DNA has significantly boosted the probability of crime detection' (H.O DNA Expansion Programme 2005:12). The development of the National DNA Database (NDNAD), which is a world renowned tool, has provided a source from which the data of DNA profiles can be stored. The information stored on the database can assist in aiding a criminal investigation through identification or elimination of individuals.

In England and Wales, anyone arrested on suspicion of a recordable offence must submit a DNA sample to the database; under current policy this is kept on permanent record until age 100, however new proposals set by the Home Office may reduce this period to a maximum of 12 years⁴. The DNA legislation in Northern Ireland is essentially the same as that in operation in England and Wales, however in Scotland the law is different and most people are removed from the database if they are acquitted.

'At 30th June 2008 there were 5,193,986 subject profiles and 329,218 crime scene profiles stored on the National DNA Database' (Email⁵). There is a UK population of nearly 61 million so when it is put into perspective the database is not that vast. By the end of 2005 the Home Office claimed that over 3.4 million DNA profiles from the majority of the known active offender population were held on the database (H.O NDNAD 2006). However it is considered an intelligence database, not a guilty or criminal database.

The NDNAD currently remains the world leader for maintaining the largest DNA database, although the US has a larger database, as a percentage of the population our database is bigger at 6% (compared with 0.5% in the USA). In comparison, the next largest database is Austria's at 0.5% of the population (McCartney Presentation 2008). The database has expanded significantly over the last five years and Europe (with an EU average of 1.13% of the population) is keen to emulate the crime-solving successes of the database.

Three agencies are currently responsible for the management and maintenance of the NDNAD; the Custodian, who is based within the Home Office, maintains the integrity of the database. A strategic board consisting of the Home Office, The Association of Chief Police Officers (ACPO), and a member of the Human Genetics Commission (HGC) carries out the

² Deoxyribonucleic Acid is the chemical which is found in the cells of all living organisms, and which carries a unique genetic code throughout generations. Half of an individual's DNA is inherited from the mother, and half from the father. It is believed that with the exception of identical twins, the DNA structure of each individual is unique. Siblings are likely to have more similar DNA to each other than are unrelated individuals. DNA profiling refers to the analysis of a DNA sample to determine from which individual it has originated. The DNA is examined to identify a gene at a particular locus on a chromosome. It is the locus that is analysed in order to obtain a profile. The locus is then made to replicate itself several times. The number of times in which it repeats itself may vary between individuals. This process is referred to as Short Tandem Repeat (STR). This process involves testing for ten STR's and a gender marker.

³ DNA profiling is more complex than fingerprinting with many stages including the process of a profile and match. DNA profiling is sometimes called DNA fingerprinting and this is a false analogy as it is a dated way of referring to DNA profiling.

⁴ As a result of the ECtHR ruling in *S. & Marper v UK* December 4 2008 – see Home Office, May 2009. *Keeping the Right People on the Database*. Science and Public Protection consultation paper.

⁵ Lipscombe, S., slipscombe@uclan.ac.uk, 2008. NDNAD (Email) Message to Fairweather, A. M., (public.enquiries@homeoffice.gsi.gov.uk). Sent Monday 1 September 2008, 16:20
Available at:

<https://webmail.uclan.ac.uk/gw/webacc?action=Item.Read&User.context=dybjkeRe4rt1ls5Iid&Item.drn=7020z1z0&merge=msgitem&Url.Folder.type=Folder.UNIVERSAL>
(Accessed 18 September 2008)

oversight of the database. The contract for receiving and loading DNA profiles onto the database is currently owned by the Forensic Science Service (FSS), which became a government owned company (GovCo) in December 2005. This contract is due for renewal in 2008 and there are also plans to establish an ethics group to contribute and offer advice (POST 2006).

New and refined techniques for DNA profiling have developed over the years⁶. SGM (Second Generation Multiplex) was the original DNA profiling system used for the database on its introduction in 1995. It allows the simultaneous analysis of 6 non-coding STR regions of DNA (12 markers or alleles) and a gender marker to produce a DNA profile with an average match probability of about 1 in 50 million.

The DNA system in current use for the NDNAD (since 1999) is SGM Plus. This system is compatible with SGM, but more discriminating. It allows the simultaneous analysis of the SGM markers and an additional 8 STR markers or alleles from 4 further non-coding STR regions of DNA⁷ to give a DNA profile with a match probability of less than 1 in 1,000 million.

An STR is a Short Tandem Repeat of the non-coding region of DNA that is repeated, end to end⁸. Only patterns of STRs (short tandem repeats) are stored on the NDNAD – not a person's full genomic sequence. Essentially, this pattern, or profile, is similar to that of a barcode. Under the current proposals by the Home Office, an individual's DNA sample, which contains complete genetic information, will only be stored on the database for six months (H.O Press Briefing 2009).

The process of DNA profiling is constantly changing due to the enhancements of methods and technology. The advance of science means that the FSS can assure quality of all these methods. PLS (pendulum list searching) and DNABOOST techniques have also been developed for mixture analysis⁹. LCN (low copy number) DNA analysis can obtain a DNA profile from a sample expected to contain very few cells. SNPs (single nucleotide polymorphism) may be the future of DNA profiling because they're more efficient than STRs¹⁰. (H.O Annual Report 2005/6:47-8). The continued development of new techniques in DNA profiling results in the constant conclusion of crimes that occurred years ago, known as cold case files.

⁶ MLP (multi locus probing) was the first technique used for DNA profiling in 1987. The FSS and the Metropolitan Police Laboratory then developed SLP (single locus probing) which was considered more suitable for forensic work. Quad the first STR DNA profiling employed by the FSS, simultaneously analysing for 4 markers in the non-coding regions of DNA to produce a DNA profile with an average match probability of about 1 in 40,000

⁷ It contains DNA primers for an additional four STR loci (D3, D16, D2 and D19). The gender marker Amelogenin (Amelo) is used for the sex-indicating test.

⁸ Different people have different numbers of these repeats and hence different lengths of repeated DNA. The STR profiling technique examines the lengths of these repeat units and converts the lengths into a digital output by labelling them with radioactive probes. A mono image is made which produces a unique bar-code. It is then possible to establish kinship patterns as a mother and father will pass on their bar codes to offspring (The Observer 8th August 2008).

⁹ It may only be possible to obtain a partial DNA profile from samples when analysed, if that sample is deficient in quantity or quality. A mixed profile is obtained when the profiles of more than one individual are present within the sample.

¹⁰ However this could be made difficult by the ECtHR ruling against permanent retention of samples. The reduced period of 6 months gives only a small window for future research into improving profiling techniques.

Following collection and analysis of a sample, a new DNA profile can be compared with the profiles stored on the database. A match can arise in four different ways:

1. A new scene of crime profile matches the profile of an individual already on the database. This can help to identify a potential suspect very rapidly;
2. A new individual's profile matches a stored scene of crime profile from an unsolved crime or crimes on the database. This type of 'speculative search' can identify a potential suspect long after a crime has been committed;
3. A new scene of crime profile is found to match that of an old crime scene. This can help the police in their investigations by linking crimes, even if a suspect is not identified; and
4. The person has been sampled and included on the database previously under the same or a different name. [However, the Data Quality and Integrity Team are constantly working to remove duplicates (H.O Annual Report 2005:41).]

Any matches identified through the database are used for intelligence purposes only, and are not evidential in court. An individual who's DNA may be matched to a crime scene sample is required to provide an additional Criminal Justice sample which is evidential. The Home Office states clearly that the NDNAD does not affect your private rights and is proportionate to the gains. It is a key police intelligence tool that helps to quickly identify offenders, make earlier arrests, secure more convictions and provide critical investigative leads for police investigations. Furthermore, it helps to catch serious offenders when they are picked up for a minor offence and their DNA is matched to samples already held on the database. Importantly it can also eliminate individuals from suspicion when their DNA does not match with that found at a crime scene (H.O NDNAD 2006). 'DNA profiling is a powerful tool in solving many serious crimes and deterring serious criminals. In a typical month, matches are found linking suspects to 30 murders, 45 rapes and 3,200 motor vehicle, property and drug crimes' (GeneWatch 2005:6).

The establishment and use in Britain since 1995 of a DNA database is claimed by UK police for having had an important role in the reduction of overall crime rates (Gunn 1998 cited by Briody 2002:159). In order to facilitate the creation of the database, it became necessary to amend and introduce new legislation, which has been a contentious issue for critics due to the lack of public debate. In addition to this, civil liberty groups continue to condemn the development of the database, as they consider it to be an infringement of human rights. The Nuffield Council has claimed that the use of bio-information for forensic purposes has the potential to raise a number of ethical, social and legal issues concerning:

- the interpretation of the bio-information;
- the collection, storage and retention of profiles and samples;
- informed consent, privacy and confidentiality in the light of data protection and human rights legislation;
- access to and use of forensic databases for purposes of research;
- sharing of bio-information for forensic purposes across international boundaries; and
- governance of research conducted by or for forensic laboratories (Nuffield 2007)

Despite ethical concerns, which are important to consider, the NDNAD is a successful crime control method, used mainly in association with volume crime, however it could be used better for the purpose of reducing the incidence of violent sexual crimes and improving the low rate of conviction. This issue within the criminal justice system is of extreme importance. Furthermore, 'the enormity of the effect on victims and on the fear of crime amongst women goes to the heart of quality of life' (HM CPS 2002:1). Home Office

figures show ‘an ongoing decline in the conviction rate for reported rape cases, reaching an all-time low of 5.6% in 2002’ (Kelly 2005). The Sexual Offences Act 2003 came into force in May 2004 and in order to strengthen protection for adults and children this involves reviewing cold cases of rape and serious sexual assault, using the NDNAD (H.O Website Victims of Crime 2006).

The reason I use the crime of sexed violence to support existence and growth of the NDNAD is for three reasons; firstly, this crime is in a state of crisis with exceptionally low prosecution rates and a high level of distress. Secondly, to provide a feminist critique and thirdly, because it is unique in comparison to other crimes due to the frequent presence of forensic evidence left behind. ‘DNA profiling is of particular value in certain offences against the person, both fatal and non-fatal, i.e. murder and sexual offences, particularly rape. It is in relation to these offences that a biological sample suitable for DNA profiling is likely to be left at the scene of the crime by the defendant, e.g. semen in an offence of rape’ (Stevenson 1993:37). The success rate for obtaining DNA recovered from crime scenes is ‘90% from semen, 87% from blood, 50% from hair with roots and 40% from saliva’ (FSS 2002). It has been shown that ‘DNA technology achieved results in rape cases both because of the physical suitability where offenders’ bodily fluids such as semen were detected, and because of the seriousness of the offence, which encouraged police to refer such cases to the laboratory’ (Briody 2002:163). I am therefore asking for a whole break down and analysis of how forensic evidence is used and practised within the CJS to achieve justice within this area of the law.

In chapter 1 of this dissertation I will introduce the problem of sexed violence within the criminal justice system by highlighting the incidence and impact of the crime. I will then discuss the reporting and trial difficulties faced by victims of sexed violence which have contributed to the low conviction rates. Despite cultural issues around consent and the masculine hegemony within the law, forensic science is still necessary for a conviction and the National DNA Database could help ensure that the use of forensic science is maximised to achieve this end.

In chapter 2 I will analyse critiques on the database, starting with the various changes in legislation regarding retention of DNA data. I will focus on the report from human rights group GeneWatch, which makes several recommendations to prevent permanent retention of DNA and development of the database, and how these views are similar to Liberty. I will discuss academic opinion and how the media impacts on society’s understanding of the database by inciting fear. In contrast to the subjective claims made by GeneWatch I will then look at the more nuanced approach from The Nuffield Council and discuss the prosecutor’s fallacy. Police error has contributed to doubts surrounding the efficacy of the database however the Home Office defends the system and I example various defences including successful crime control statistics. Finally I will look at how the rights of women and Violence Against Women (VAW) initiatives should also be considered as important to human rights groups such as GeneWatch.

In chapter 3 I will look at various examples of NDNAD success, starting with the advances in identification since fingerprinting and how DNA evidence can also be used for exoneration purposes. I will identify successful Home Office projects and cold case reviews which highlight the importance of DNA retention for crime control purposes. Advances in science have allowed for the analysis of crime scene samples that are mixed or partial and familial testing has broadened the abilities of the database. Despite the ECtHR

ruling which found permanent retention of DNA an infringement to human rights, I will explore arguments for a mass database. This could reduce civil liberty concerns and improve the crime detecting abilities of the database. I will then stress the particular benefits DNA databasing can bring to cases of sexed violence through improved conviction rates, and even a reduction in the incidence of sexed violence due to deterrence theory. Ultimately there are several improvements which need to be implemented in future for the accepted and positive functioning of the database.

In chapter 4 I will look at understandings of privacy, human rights and surveillance in relation to the specific database concerns. I will then consult the history and representation of women in the legal system and explain the masculine hegemony of the law. I will introduce the concept of a modern form of privacy as masculinist which operates to hinder sexed violence criminal justice. There are several definitions of privacy and this one specifically explores the elusive and ominous privacy arguments for having your DNA profile taken and stored. In order to further analyse and explain objections to the database I will postulate that human rights discourse could be ascribing to this form of privacy. It is important to recognise and confront this possibility of privacy as masculinist in order to understand and prevent objections to the database, which has been defended throughout the dissertation as a successful crime control method.

In my conclusion I will address how databasing techniques are a part of the modern world we live. It is important to improve the database and achieve support within society so that a stand against sexed violence and VAW can be achieved. Ultimately a compromise is necessary between operation and regulation, but technologies of fear will only hinder criminal justice, not improve it.

1) The issue of sexed violence

In this first chapter, I will problematise the serious and damaging issue of sexed violence relating to the high incidence, poor reporting and intimidating court procedure. The current criminal justice system (CJS) does not function effectively to deter or prosecute criminals responsible for this crime. I will further define how the state has legitimised sexed violence through masculine hegemony¹¹ and the patriarchal order of the law¹² and identify the implications posed by this system for those suffering from this abuse. I will argue that the operation of the legal system within the UK has contributed to the incidence of rape and abuse, and it is also a causal factor for the lack of successful prosecution and clearance rates.

While the number of rapes reported to the police and recorded has increased substantially over recent years (HM Govt. 2008:14), there has barely been any increase in the number of convictions. The justice gap is getting wider and there is little deterring the rapist. ‘What rape victims probably don't realise when they take the momentous decision of making a rape accusation is just how unlikely it is that their attacker will end up in jail’ (BBC News, Tighe 2006). The conviction rate is less than 6% for recorded offences of rape. ‘The proportion of rape allegations that result in a conviction currently stands at 5.6% out of 14,000 reported offences’ (BBC News 2006). There are several factors which contribute to this state of affairs and I will explore how the National DNA Database (NDNAD) could improve the efficiency of crime detection and punishment, especially for survivors and victims of sexual and violent abuse.

Sexed Violence

The majority of Sexed Violence (SV) crime is committed by men against women and children and this represents both a cause and consequence of gender inequality¹³. ‘There were 14,002 recorded rapes in 2004/05, 92 % of which were rapes of a female’ (Nicholas, Povey et al 2005:80). The term rape is now classified as penetration by the penis of somebody's vagina, anus or mouth, involving the exercise of violence, without their consent¹⁴. Rape can be committed against men or women, but since it involves penile penetration it is only committed by men¹⁵.

Most serious sexual crime encompasses rape, sexual assault, and sexual activity with children. Using the terminology of ‘sex crime’, rape and assault, ignores the gendered and violent aspect of crimes committed by men and this is central because it ‘erases the

¹¹ Masculinities embedded within criminal justice institutions have been revealed. These comprise of hierarchies of dominance and subordination among men and between men and women. Walkate, S. (1995) *Gender and Crime*. Prentice Hall. London.

¹² Critical feminist criminology challenges andro-centrism (or male-centredness). Women should be visible as autonomous subjects within the patriarchal institution of the law, CJS and policing. Therefore it is subjective and objectivity is imbued with masculinist mis-representations of women. In contrast to the positivist commitment to objectivity, the woman centred character of feminist research highlights the importance of subjectivity and meaning. See Radford, J. (2000). Kelly, L. (2000). Daly, K. (1998).

¹³ This is not to say that men do not suffer from sexed violence, however I will focus on the majority of sexed violence victims in my dissertation, and they are women.

¹⁴ ‘A person consents if s/he agrees by choice and has the freedom and capacity to make that choice.’ Sexual Offences Act, section 74. Consent means making an active decision to say yes, an assumption of consent is not enough (H.O #4 2006).

¹⁵ Except for Assault by Penetration which can be committed by women against men. See the Home Office Guide to the Sexual Offences Act 2003 leaflet for further definitions on the of law sexual offenses. Adults: Safer from Sexual Crime. May 2004.

experiences of the majority of victims of sexual assault' (Young 1998:147). The preferred term 'sexed violence' problematises the perceived sexual aspect of the crime. It is necessary to problematise or breach the conventional self-evidence of sex and gender. 'Reading violence as sexed helps to break down the arbitrary division which separates public from privatised forms of sexual violence...reading a violent act as sexed crime means questioning the implicit messages about masculinity, femininity and sexuality which are contained in the act itself' (Howe 1998:6). I will use the issue of SV¹⁶ to exemplify the need for the NDNAD to be developed and accepted for purposes of identification and prosecution.

Incidence

According to research conducted in the UK, 96% of those surveyed did not know the true extent of rape or thought it was far lower than the true figure. SV crime is not in the public domain. Only 4% thought the number of women raped exceeds 10,000 per year when the true figure is likely to be well in excess of 50,000 (AIUK 2005). Available data suggests that nearly one in four women worldwide may experience sexual violence by an intimate partner in their lifetime (WHO 2002). 'Few of those offences will be reported...and fewer still of the reports will find their way into the official crime statistics' (Croall 1998:196). Since the age of 16, 5% of women in the UK have been raped (Fawcett 2008: Source BCS 2001) and there are increasing numbers of young victims of rape aged under 20-years-old (Kelly 2005:55).

In 2007/08 there were 53,540 recorded sexual offences (H.O Statistical Bulletin 2008:9). The police recorded 41,460 most serious sexual offences in 2007/08, 5% fewer than the 43,738 recorded in 2006/07. These offences accounted for 77% of total sexual offences and less than 1% of all recorded crime in 2007/08.

Within this total, rapes of a female fell by 8% to 11,648 offences¹⁷, and rapes of a male fell by 13% to 1,006 offences. Sexual assaults on a female fell by 4% to 20,534 offences, and sexual assaults on a male also fell by 4% to 2,642 offences (H.O Statistical Bulletin 2008:9). These figures indicate a decrease in the number of recorded sexual offences. However, it is hard to tell whether this reflects a decrease in the number of people reporting the crime or a decrease in the incidence of the crime. I would hypothesise that one of the reasons behind the drop in figures is due to the increased availability of DNA forensic evidence on the NDNAD but more research would be necessary to corroborate this. Nonetheless, the issue throughout this dissertation is the extremely low conviction rate for SV.

Impact

Sexual violence has a major psychological impact on those who survive. 'Rape is perhaps the most devastating of all acts conducted by one human on another. Woman or man, the damage to the victim is life changing' (MPS 2002). Sexual violence against women by men is an everyday occurrence and '167 women are raped everyday in the UK' (AIUK 2005). Stephen Wooler, Chief Inspector of HMCPSI and chair of the CJ Chief Inspectors' Group said 'there are few offences that impact so severely on the victim as rape' (H.O Press Release 2005). Furthermore, survivors of rape have to endure an intrusive physical examination and some a lifetime of reliving the assault. Many endure months of anguish and emotional trauma

¹⁶ See Howe, A. (1998) *Sexed Crime In The News*. The Federation Press. The term sexed violence encourages us to ask questions about the sexual aspect of the violence. Every violent act of rape is sexed and directly related to gender roles and concepts, within society and the law.

¹⁷ With a sanction detection rate (clear-up) of 24.8% (H.O Statistical Bulletin 2008:192). *Not all sanction detections result in a subsequent conviction.*

as the wheels of the judicial process turn (MPS Sapphire 2002:1). Home Office Minister Baroness Scotland said, 'sexual violence is a horrific crime which deeply affects the lives of victims and their families. One in four is under the age of 18. More work is needed to address the gap between the reporting of rape and convictions to ensure perpetrators are brought to justice and victims have confidence in the criminal justice system' (H.O Press Release 2005).

Reporting

The actual occurrence of domestic violence and rape has been largely ignored in criminological literature until recently. While measures of domestic violence incidence are vague, victim surveys do suggest that there are low reporting rates for such offences and yet high rates of distress (Stanko 1990 cited in *Criminology: A Reader* 2002:499). It is currently estimated that between 75% and 95% of rape crimes are never reported to the police (HMCPSI 2007:2.1). Reporting of rape is notoriously low with many specialists in the field highlighting that only 1 in 10 victims even report to police. (MPS Sapphire 2002:3).

'Rape is an under-reported crime and therefore a more extensive and urgent problem than is often assumed' (Davidson & Layder 1994:80). Some rape victims are so scared or confused they fail to come forward until days or weeks after the crime has occurred and this has serious evidential implications. 'The defence also uses this fact at a trial to suggest the victim has made up the allegation' (BBC News 2006). Delays in reporting the offence cause difficulties in preparation of the case, both with witness testimony and forensic evidence. Mary Newton, manager of the dedicated Sexual Offences Intelligence Service said, 'the priority must be to ensure that as much forensic evidence as possible is preserved for future court proceedings, as well as to ensure the victim feels as safe and reassured as possible in a traumatic situation. Evidence lost in the hours after an attack could often have proved vital in securing convictions or in exonerating an innocent person' (FSS 2007).

The sensitivity of these offences has resulted in under-reporting; the Home Office says that,

'Many victims of sexual and domestic violence in particular find it very difficult to report the crimes committed against them, or to engage with the CJS, because they are too traumatised and are reluctant to relive their experiences or break up the family. This is one of the reasons why very few perpetrators of sex offences in particular are convicted for their crimes. Earlier and better engagement with victims, awareness-raising and encouraging victims and witnesses to come forward to the police can all play a part in improving incidence and low conviction rates' (HM Govt 2008:47).

The statement above denies that one of the main reasons victims do not report the crime of rape to the police is precisely *because* of the difficulties and ignorance within the CJS and among the police, not because they are too traumatised, or fear damaging family relationships.

One of the reasons women have been reticent to complain about the assaults they have suffered is because they fear they would receive little sympathy or help from the police or legal system. Women fear reporting the crime because women are seen as provoking their own demise and culpable for their behaviour. 'The notion that women provoke men to hurt them is one of the English criminal law's enduring truths, and whether it is enshrined in a provocation defence or a plea of mitigation, it will continue to buttress the antiquated 'moral' view that women who make their male partners angry provoke their own demise' (Howe 1998:30). Any inference that the complainant may have contributed to the offence has been criticised as representing 'an antiquated view of women and their participation in the world by saying that women who engage in particular behaviour, such as being out at night and

drinking, put themselves at risk and make themselves vulnerable to sexual assault or, worse, freely available for sex' (van de Zandt 1998 cited by Briody 2002:176).

However, there has been a progressive increase in the number of rape cases reported to the police for more than 20 years. This trend shows no sign of slowing, with an increase in recorded rape between 2001/05 of 40.9% [from 9,734 to 13,712 recorded crimes] (HMCPSI 2007:9). The Government has worked to improve the level of reporting through the opening of more Sexual Assault Referral Centres (SARCs) in 2005 but there are only 15 centres currently open. (H.O Statistical Bulletin 2008:9). Independent Sexual Violence Advisers (ISVA) work with the police to facilitate the collection of vital evidence through forensic examination, which can help to secure convictions¹⁸. The Home Office aims to more than double the current number of SARCs, to ensure that they are available to all victims of sexual violence by 2011 (HM Govt 2008:48). New government initiatives do signify a change in attitude but the impact of these reforms are slow and hard to evaluate. Furthermore, these centres can only help so much if the forensic evidence they collect can't be matched with DNA evidence on the NDNAD.

Trial

Police operate within a very considerable range of discretion, processing only a proportion of incidents and citizens through to a full criminal charge; therefore there is extreme difficulty in putting forward a rape charge¹⁹. Between half and two thirds of cases reported do not advance beyond the investigation stage (HMCPS & HMIC, 2007). The HM CPS inspection team found that 'victims from ethnic minorities find particular difficulty in bringing offences against them to police notice²⁰' (HM CPS 2002:19). With less than a quarter of rape allegations resulting in the suspect being charged, the real odds of a rapist facing a court of law are in the region of 1 in a 100 (MPS Sapphire 2002:3).

Sexual offences are also particularly affected by the process of attrition where cases are thrown out at court. 'There are often no visible injuries and no witnesses, and in trials the victim's version of events is pitted against the defendant' (Croall 1998:196). High levels of attrition are also set against a background of decreasing detection rates. While detection rates remained broadly stable between 1990 and 1997, they have fallen steadily since and continue to do so. Although this trend now appears to be slowing, HMIC data covering 2001/02 to 2004/05 illustrate the ongoing decline – from 41 to 37, to 31 to 30% over the four-year period. (HMCPSI 2007:9) The 2002 HM CPS report highlighted the dilemma that forces face as a result of current classification categories under the HO CR²¹ – unless there is sufficient evidence to charge a suspect, the crime must remain classified as 'undetected', regardless of the fact that no other person will be sought for the offence. (HMCPSI 2007:3.48) The report 'Without Consent' conducted a study in 2005 where the suspect was either known or identified following investigation in 80% of cases that were classified as undetected (320 out

¹⁸ An evaluation of SARCs conducted in 2004 found that proactive re-contacting of victims by support workers attached to SARCs was associated with reduced withdrawals from the criminal justice process. (HM Govt. 2008:17)

¹⁹ In 1985 Jacqueline Berkeley was convicted of 'wasting police time' and given a suspended sentence of two years because she was courageous enough to complain of rape by two police officers at Moss Side police station in Manchester. (Guardian 12/4/85 quoted by Farrell 1992:134)

²⁰ In the Metropolitan Police Service (MPS), for example, 88 minority ethnic women informed the Haven Centre (a dedicated sexual assault referral centre) of offences against them between May 2000 and July 2001. Only four wanted police to be involved, whilst a further five only supplied information anonymously.

²¹ Home Office Counting Rules.

of 402 cases). There were four main reasons why a suspect was not charged or no further action was taken:

- The victim chose not to complete the initial process (14.1%);
- The victim withdrew support for the investigation or prosecution (16.6%);
- police decision that there was insufficient evidence (8.1%); and
- Crown Prosecution Service (CPS) advice (50.6 %) (HMCPSP 2007:3.47).

The latter of the above points are especially negative and ominous. Temkin 1999 states that 'lack of resources and enduring cultural resistance has limited the ability of the police to respond sensitively and effectively to sexual assault victims' (Cited in the Oxford Handbook of Criminology 2002:437). Rape trials often become a test of the victim's credibility which deters many women from reporting the crime and taking cases to court. 'Serious sexual crimes such as rape have low reporting rates because of women's fear of shame and of police and court procedures' (Heidensohn 2002:499). Trials continue to collapse due to the issue of consent and lack of sufficient evidence.

In addition to considerations of the victim, the most common reasons for the DPP²² withdrawing prosecutions are 'that there is simply not a sufficient body of admissible, reliable evidence available to establish a case in law and thus to justify a prosecution' (Sallmann & Willis 1984 cited by Briody 2002:174). Prosecutors treat medical evidence as an important factor in the prosecution of rape offences, and it was relevant to the investigation in 58 out of the 75 cases in the charged file sample (HMCPSP 2007:7.28). Furthermore, 'most defendants in rape and other sexual assault cases plead not guilty, making a conviction more difficult and many rape cases are subsequently reduced to sexual assault' (Croall 1998:196). Solicitor General Mike O'Brien also wants to examine whether greater legal protection should be offered to those who are unable to consent to sex due to alcohol or drugs (BBC News 2006), this is because 'when complainants are influenced by drugs or alcohol, a jury was almost 30 times more likely to acquit' (Briody 2002:170).

Judge-made law made it difficult for the Crown to secure convictions however the CPS has reformed its own procedures in rape cases and it now initiates more prosecutions. The CPS can assist in charging so that it is not entirely down to the discretion of the police; the discretion is held by the CPS. Nevertheless, this change in the law has yet to improve prosecution or conviction rates. However there have also been several improvements to the court process which should help women. Recent changes in legislation²³ now place limitations on examining the previous sexual history of victims at trials and there is a need to ensure that victims are aware of this new change in law. This should give them greater confidence in the trial process, which has in the past been perceived to be a trial of the victim, not the offender. The case of R v Edwards has also enabled similar fact evidence from previous rape trials when the offender was acquitted to be admissible in a subsequent trial of the same offender (MPS Sapphire 2002:4). Also, video interviewing of rape victims, (filmed at the time of their initial complaint) has been developed for use throughout the service [in response to the Youth Justice and Criminal Evidence Act] (MPS Sapphire 200:14).

Both the legal processes and the wider cultural representation of women who have been subject to men's violence has historically been infused with patriarchy and actively served to subordinate and disadvantage women. The power of hegemony resides in the media,

²² Director of public prosecutions.

²³ Section 41 of the Youth Justice and Criminal Evidence Act 2000.

societal and juror response to sexed crimes, these also perpetuate current scripts about SV and operate patriarchal opinions that degrade and affect women²⁴. ‘Juries remain stubbornly resistant to convict. If the prosecution is allowed to call expert witnesses on trauma and other psychological effects of sexual violence, perhaps the defence ought to be able to call its own witnesses, which might leave the jury just as confused as before’ (BBC News Tighe 2006). Juries are also said to find it hard to understand why some rape victims suffer no physical injury, or why battered wives often return to their abusers (BBC News 2006). Therefore, jurors are equally responsible for the low conviction rate. ‘The stereotypes, values and beliefs of judges and members of the jury exert a powerful influence over whether or not a given act of sexual violence ever becomes a rape statistic²⁵’ (Davidson & Layder 1994:74). The idea is to challenge prevailing attitudes about how women who have been raped should behave, both in court and in their dealings with the police.

Conviction

Solicitor General Mike O'Brien told the BBC the number of complaints of rape had gone up sharply while convictions had only risen slightly. ‘An awful lot of people who are committing rapes are getting away with it’ (BBC News, Tighe 2006). The criminal justice system in the UK and in the USA has been criticised for not providing justice for survivors and victims of SV. ‘Nearly every country in Europe convicts a higher proportion of people accused of rape than Britain²⁶’ (BBC News, Tighe 2006). The conviction rate for rape is significantly lower than for other serious violent offences, which is approximately 14% (HM Govt. 2008:14). This indicates that other crime is taken more seriously.²⁷ ‘A rape victim may suffer further injury from the legal system after undergoing a violent sexual assault’ (Young 1998:15), especially when an ‘injustice’ occurs, so improving this situation must therefore be a top priority.

Prior to the 2002 thematic inspection, the rate of conviction for rape, after trial, had declined from one in three cases reported (33.3%) in 1977 to one in thirteen (7.7%) in 1999. Additionally, only one in five reported cases reached the trial stage (20.0%). By the time the inspection report was published, Home Office figures showed that conviction rates for reported rape offences had reached an all-time low, with only one in eighteen reported cases resulting in a conviction (5.6%). (HMCPSI 2007:2.9) In 2004 the conviction rate for rape was 5.3% which is the lowest rate on record. Around half of convictions were due to a

²⁴ Public attitudes: More than a quarter (26%) of people think a woman was partially or totally responsible for being raped if she was wearing sexy or revealing clothing. More than one in five (22%) hold the same view if a woman has many sexual partners. Around one in 12 people (8%) believe a woman is *totally* responsible for being raped if she has many sexual partners (AIUK 2005).

²⁵ Rape statistics are social constructions rather than a neutral and objective measure of the *real* incidence. Rape statistics are not reliable quantitative results due to the failure of accurate research. It is also due to the nature of the crime and the reporting/sentencing procedure. This is a result of several social factors, firstly, not all rape crimes are reported, secondly, they are not all recorded and thirdly, these cases are either closed without charge or reduced to a lesser charge of sexual assault. The extent of the crime will never be known. The CJS has only recently acknowledged the poor prosecution rates. It is important to be aware of these factors when analysing all statistics.

²⁶ A study found the only European country with a lower conviction rate than the UK was Ireland (Fawcett 2008).

²⁷ Sanction detection rates for policing recorded drug offenses in 2008/09 are 95% compared to that of all sexual offences at 30% (H.O Statistical Bulletin 2008:27).

The DNA expansion programme 2000-05 concentrated statistical analysis to volume crime such as motor vehicle theft and burglary, (as focussed upon [and ignored even?] by the majority of home office reports). The Science & Innovation strategy 2005-08 focussed mainly on immigration, terrorism and anti-social behaviour. The impact DNA evidence could make in improving convictions rates and cases of sexed violence is not being maximised. Sexed violence is being ignored.

guilty plea, and where a full trial took place, an acquittal was the most likely outcome (Kelly 2005). Of the 1,471 reports where relevant information was supplied, 14% (208) involved rape by a stranger. Only 12% (26) of these cases resulted in a prosecution, which is unacceptable (HM CPS 2002:31). Clearly improved methods of collecting and storing evidence via the NDNAD could increase stranger rape prosecution success. Furthermore, the percentage of suspects convicted of rape in cases where the victim was under 16 at the time of the incident (37.5%) was more than twice that in cases where the victim was older (16%). (HM CPS 2002:75) This shows juries are sympathetic to the law that a child under the age of 16 cannot legally consent to sex, and perhaps less sympathetic to older claimants.

Temkin reports that in rape cases, ‘although vaginal swabs were taken from complainants as a matter of course, samples were not always sent for analysis, the police instead waiting to see if a prosecution was probable’ (Redmayne 2001:20). Furthermore, it has been found that ‘DNA testing appeared to be conducted in a minority of cases’ (Kelly 2005:58). It is unclear why and evidently a significant and unacceptable missed opportunity. An example which best illustrates a general lack of awareness is that ‘in 80% of submissions to the Forensic Science Service (FSS) for examination where ‘consent’ is the issue, investigating officers are not requesting any evidential DNA samples to be cross-matched with existing samples on the National DNA Database for undetected offences’ (HM CPS 2002:37). This is a serious oversight. So it seems that trace evidence is currently used as a corroborating tool; if there is no case to speak of, or a case that stands on its own, it will not be sent for analysis. Although this may be considered a measured constraint to some, it is a serious hindrance in finding a rapist guilty. Indeed this practice would need to be improved (among others – as will be identified in chapter 4) for more successful operation of the DB.

Violence against women is not yet eliminated. ‘Law and criminal justice systems still fail effectively to sanction or prosecute this violence or accord effective protection to women and children victimised’ (Radford 2001:234). Through its failure to recognise male sexual violence or provide protection for women and children, the law acts as a form of male control. The decline in successful prosecutions is in correlation with the preservation of masculine hegemony and control.

However, the recent establishment of Specialist Domestic Violence Courts (SDVCs) could improve the court process. ‘A review of 23 SDVCs conducted between October 2006 and March 2007 found that ten had achieved successful prosecutions in more than 70% of domestic violence cases. These ten courts also had the fewest cases discontinued. Nationally, there was a 15% increase in the number of domestic violence cases being prosecuted in 2006/07 compared with 2005/06, and successful prosecutions rose from 59.7% to 65.2% in the same period’ (HM Govt. 2008:22).

Cultural

Ultimately a discourse exists where rape is tolerated because perpetrators of SV crime are rarely punished. ‘The reluctance of the police to record or prosecute a complaint of rape appears to be matched by the reluctance of judges to convict and sentence men accused of rape’ (Davidson & Layder 1994:74). The injustice in this area of criminality has somewhat perpetuated the existence of the crime of rape²⁸. ‘Cast in a mould constructed within male-dominated society, women’s experiences of sexual and physical violation take on an illusion

²⁸ Because the severity of rape has been ignored for so long, the prosecution rates remain unacceptably low and this continues on a cycle where it continues to be un-recognised, and this has the effect of perpetuating the crime as almost acceptable.

of normality, ordinariness' (Stanko 2002:252). Man-made law should be exposed for what it is, as shaped by male norms and interests and 'structured around the situations and circumstances they, rather than women, commonly encounter' (Radford 2001:233).

Smart challenges the way law constitutes victims within our culture by sexing its subjects. As soon as you sex a subject, you are subordinating it²⁹. Smart says that, 'the judiciary and/or legal jurisprudence retains a view of women as a homogenous category and then attributes to this category stereotypical behaviours and emotions which it then reifies in its judicial utterances' (Smart 1999:239). Culturally men are expected to be aggressive and dominant in all spheres of action³⁰. The connection between male sexuality and aggression has been legitimated by psychologists and the legal system alike (Smart 1999:104). Ultimately, gender neutrality is essential for changing the discourse within law and maybe the mass collection and implementation of DNA onto a database would remove gender distinctions³¹. 'Feminist arguments designed to persuade the courts to recognise women's vulnerability to sexual violence and deeply entrenched legal biases against women ran aground against firmly held legal norms and social stereotypes. What success feminists have enjoyed in the court in the context of the criminal law has come when they have deployed arguments that tend to reify female sexual vulnerability and male sexual aggression. (Campbell 2001:347).

Women have faced cultural challenges for years and this has not been helped by ignorant attitudes in academia; Pollak (1961) warns against being deceived by false accusations of rape and Davis (1971) argues that the individual prostitute is socially expendable. Up until 1991 (enshrined in legislation 1995) it was legally sanctioned to rape within marriage³². Feminist struggles around the law on rape and marriage were successful in

²⁹ There is something implicit about the language of objectifying someone and what is done to them in that process. It can become a self fulfilling prophecy. There is no analysis of the language in the roles we take on. It is very tenacious and difficult to break and there are similar patterns in the court language of the CJS. The environment and the gender of the prosecutors and judge, and the language that's used; where the victim and perpetrator are told 'you are one of these' (either victim or perpetrator and so you comply) contributes to objectifying people. See Foucault, Jean Paul Sartre and Simone DeBeauvoir.

³⁰ There are hierarchal, patriarchal systems in most cultures where women are subordinate and men are considered violent by nature and therefore this violence against women is accepted. According to Coward, positivistic ideas about sexed violence, for example, the concept of 'natural instincts' are 'very comforting'. Coward, R. (1984) 'The Instinct, in Female Desire: Women's Sexuality Today.' Paladin, London.

³¹ Is gender neutrality possible? It is essential for changing discourse within the law, yet you have to maintain gender distinctions to identify 'actors' within an offence of rape. However the offence should stand independent of the gender of the victim and/or perpetrator. Gender needs to be removed entirely so the focus can be on the assault taken place. However, when it comes to the DB, the distinction between male and female is essential. Ultimately, it is the meanings and stereotypes underlying these distinctions which need to be removed.

³² *R v R* [1992] 1 A.C. 599, House of Lords. Courts over-ruled parliament. Crime - Sexual offences - Rape - Husband and wife living apart - Husband attempting sexual intercourse with wife against her will - Whether husband immune from charge of attempted rape - Sexual Offences (Amendment) Act 1976 (c. 82), s. 1(1). The judge rejected his submission that by virtue of section 1(1) of the Sexual Offences (Amendment) Act 1976 the offence of rape was one which was not known to the law where the defendant was the husband of the alleged victim. He thereupon pleaded guilty to attempted rape and assault occasioning actual bodily harm and was convicted. On the defendant's appeal against his conviction of attempted rape, the Court of Appeal (Criminal Division) dismissed the appeal; Held, dismissing the appeal, that there was no longer a rule of law that a wife was deemed to have consented irrevocably to sexual intercourse with her husband; and that, therefore, a husband could be convicted of the rape or attempted rape of his wife where she had withdrawn her consent to sexual intercourse; that section 1(1) of the Sexual Offences (Amendment) Act 1976 did not give statutory recognition to and perpetuate the

resisting and overturning what the state prescribed as criminal. The state is now conceptualised as a gendered set of apparatus, serving the aims of a patriarchal order. It is not only that state institutions are overwhelmingly staffed by men but that masculinist ideologies inform the policy and decision making process³³. Essentially the masculine hegemony within the law provided an excuse for discriminatory practices against women and enforced these attitudes until recently.

Some women feel that the police force still remain insensitive to violence against women, treating reported cases as mere *domestics*. The state legitimises domestic violence by not acknowledging it. Staff members across the CJS are equally likely to be influenced by available stereotypical explanations of female behaviour. Therefore a police officer, who fails to comprehend that a woman can be raped against her will or tends to assume that false accusations are frequent occurrences, may be less than understanding and sympathetic in his treatment of the victim³⁴. However overall research suggests the rate of false allegations of rape is no higher than those of other crimes³⁵ (Kelly 2005:81).

The CJS has its own cultural logic and the Government is still working on challenging this. 'The courts are unwilling to compromise deeply held legal and social norms' (Campbell 2001:347). Smart says that 'the legal profession and judiciary showed themselves to be largely impervious to attempts to redefine the issue of sexual assault as an incident of 'real' harm.' In addition, the legal profession demonstrates 'the desire to retain the power to define what constituted a harm or a crime and to impose a benevolent outlook on men who erred' (Smart 1999:364).

The Sexual Offences Act 2003 was the first major overhaul of sexual offences legislation for more than a century, setting out a strong, clear and modern approach to this sensitive area of the law. Despite its introduction in May 2004, to help define and prosecute sexual offenses³⁶, it has not improved the prosecution rate and remains unacceptably low.

Even if the entire CJS was not structured around hegemonic masculinity, the overall burden of proof still remains. This entails that a UK citizen is innocent until proven guilty. Therefore you have to presume that the woman consented to sex, and the man is innocent, unless there is sufficient forensic evidence (and signs of violence) to the contrary. This is highly problematic because the woman is firmly challenged in her claim and has to prove the incident took place. There is not another crime where the victim is questioned and challenged

former rule; and that, accordingly, the defendant's conviction would be upheld. UK Law online. <http://www.leeds.ac.uk/law/hamlyn/rvr.htm>

³³ Hester, M., Kelly, L. & Radford, J. (1996) 'Introduction' in *Women, Violence and Male Power*. Buckingham, Open University Press.

³⁴ This may not be applicable to female police officers, although women ascribe to hegemonic beliefs and stereotypes too.

³⁵ In the UK 8% of cases reported to the police were designated 'false' reports. However, internal police rules specify that only cases where either there is a strong and credible admission by the complainants, or where there are strong evidential grounds, should be classified as 'false'. Further investigation of this figure of 8% found that only 3% of cases designated false fell within the police categories of 'probable' and 'possible' false allegations (as opposed to additionally those classed as 'uncertain'). (Kelly 2005). There is an over-estimation of the scale of false allegations by police and prosecutors and subjective judgements are still being made about victims. This results in poor communication and loss of confidence between complainants and police (Kelly 2005; HMCPSI 2007).

³⁶ 'Consent' was given a legal definition which makes it easier for juries to make fair and balanced decisions on the question of consent, and sends a clear signal to men that they can't make assumptions. Also, all sexual offences now apply equally to males and females of any sexual orientation to remove discrimination (H.O Victims of Crime; Sexual offences 2006).

like this. It depends absolutely on their consent or absence of consent³⁷. Consent is ultimately a cultural issue, and consent to sex by a woman is often assumed within UK culture³⁸. Whilst SV crime continues to occur without severe consequences, the issue of consent will remain. Trying to consult the societal cause for SV is substantial because attitudes about sex and crime run deep into our belief systems. Furthermore, it hasn't provided any immediate solution to the problem and therefore another method needs to be adopted³⁹.

Moreover, the failure of legislative reforms and Government initiatives⁴⁰ to increase the prosecution rate has done little to inspire confidence that reform of more criminal laws will bring safety and justice for women. Unfortunately, attitudes remain deeply imbedded and so the success of these initiatives is slow.

Forensic Evidence

It is important to utilise forensic powers as a way of reforming and improving the incidence and prosecution of SV. Forensic evidence can be maximised through the collection and storage of data. Changes in the law have assisted the development of the NDNAD which is paramount within the court process for providing crucial evidence, initiating guilty pleas and assisting women in their claim. This is how the DB can help the striking issue that has so far been ignored by a masculinist hegemonic legal system⁴¹.

Due to the nature of SV crime, there is often DNA evidence available which is used almost automatically. 'It is understood DNA evidence significantly increases the chance that a criminal will be identified'⁴²(Nuffield bioethics 1/11/06). In 2005/06, the number of cases linked to one or more subjects, was 1146 for violent sex crime; 635 for rape and 197 for other sexual offenses (H.O Annual Report 2005:35). Although DNA makes a relatively small contribution to all detections, it makes a powerful contribution to those cases in which it is available. (H.O 2005:15) This is especially true for cases of sexed violence as identified by Briody 2004 (see chapter 3).

Physical evidence can provide an important tool for linking together crimes as the work of a single perpetrator. 'Advances in forensic technology mean that it is possible to gather and use more evidence than ever before in rape cases as well as making the prospect of coming forward less stressful' (FSS 2007). The NDNAD would ensure that this potential is maximised. DNA analysis provides unusually powerful and persuasive evidence for courts to evaluate, since this evidence is frequently accompanied by bio statistical evaluations

³⁷ This is the problem presented by Pateman. See Chapter 4 (pg 71-89) in: Pateman, C. (1989) *The Disorder of Women: Democracy, Feminism, and Political Theory*. Stanford University Press.

³⁸ An Amnesty International survey recently said a third of respondents thought women who behaved flirtatiously were wholly or partly responsible if they were raped (BBC News Tighe 2006). Nearly a third of people (30%) say a woman was partially or totally responsible for being raped if she was drunk (Fawcett 2008). Also see Home Office 'Safety and Justice' Paper 2003:16

³⁹ Sociological understandings of rape are deeply engrained and a full analysis is beyond the scope of this dissertation.

⁴⁰ Sexual Offense Act 2003; Home office advertising campaign warning men that they could go to jail for rape if they have sex without consent; Specially trained officers and specialist rape prosecutors in every area; The National Delivery Plan for Domestic Violence and the Cross Government Action Plan on Sexual Violence and Abuse (HM Govt. 2008:17-22)

⁴¹ There is a parallel here between consenting to a sex act and consent for giving/taking DNA; one has the right not to consent to either. However I will challenge the value placed on DNA samples used for criminal identification purposes in chapter 4.

⁴² For example, the detection rate in domestic burglary is 16% when no DNA evidence is available, but 41% when a sample is found' (Nuffield bioethics 1/11/06).

‘indicating that the matching pattern between the forensic spectrum and defendant is exceedingly rare in the population, occurring perhaps in one person in a million, a billion or even a trillion’ (Jeffreys 1993:22).

Another benefit of using DNA, aside from its reliability, is the common presence of evidence at crime scenes. ‘Physical evidence was present at 88 per cent of crime scenes’ (Redmayne 2001:17) and this identifies the need for a database which could match crime scene data and locate perpetrators. DNA data should be used as a matter of course in *all* rape cases. Forensic evidence is *essential* for laying a foundation that will initiate a fair trial and avoid the accused having access to excuses of denial. The use of DNA increases the chance that crimes will be detected and brought to justice, not least because the existence of DNA evidence linking an offender to a crime can provoke early guilty pleas⁴³ and remove the need for cross-examination; it can also exonerate the innocent. ‘The number of DNA matches more than doubled between 1998/99 and 2006/07. There is a particular focus on using this technology to identify rape offenders through Operation Advance⁴⁴’ (HM Govt. 2008:21)

It is a basic tenet of police work that the earlier action is taken to obtain evidence, particularly forensic or physical evidence, the greater the prospect of a successful outcome. ‘It is essential that there is sufficient evidence to charge the offender before the offence can be classified as detected and, given the seriousness of the crime of rape, there should be few occasions when a case is concluded in this way’ (HMCPSI 2007:3.40). There are grave errors in the UK criminal justice system when accusations of rape fail due to a lack of evidence because we have the technology to prevent such errors! Either the charge is reduced to sexual assault or the case is dropped entirely. In several cases, the report was ‘no crime’ on the basis that there was insufficient evidence that a crime had taken place (for example, where the only issue was consent). (HMCPSI 2007:3.22).

In order to hold offenders accountable for their crimes, recommended court responses to VAW ask criminal court judges to take into account special considerations in criminal cases. ‘The message must be loud and clear that violence against women will not be tolerated by the justice system. Penalties should be designed to motivate the offender to stop his violent and abusive behaviour’. These include the permission of ‘expert witness testimony on a range of issues from rape trauma syndrome to DNA testing’ (Kuriansky & Little 1998).

National DNA Database

A lot of literature highlights the inadequacies of the CJS in prosecuting sexual abuse cases (Pateman 1989, Smart 1998, Radford 2001, Kelly 2005), but has not suggested practical alternatives for change. The controversial question of whether our penal system should implement permanent retention of DNA is a moral challenge of a scale that makes it one of the most pressing social issues of the day. The Government has finally recognised, via publication⁴⁵, the unacceptable prosecution rate for SV and is trying to rectify the issue. The Government appears determined to tackle the gap between the reporting of rape and

⁴³ Offenders may confess to a crime because DNA is powerful forensic evidence

⁴⁴ See Chapter 3 for more details on Operation Advance

⁴⁵ Kelly, L., Lovett, J., & Regan, L. (2005) A gap or a chasm? Attrition in reported rape cases. Home Office Research Study 293. HMCpsi (2007) Without Consent A report on the joint review of the investigation and prosecution of rape offences.

convictions and ‘the implementation of the Rape Action Plan⁴⁶ in 2002 has greatly improved good practice by police and prosecutors’ (H.O Press Release 2005).

Following the HMIC report 2007, which highlighted low conviction rates for rape, the Forensic Science Service is working to implement new procedures to help rape victims and provide victims with a choice of male or female Sexual Offence Examiner (SOE). Recommendations throughout the report focus on the importance of obtaining forensic evidence as a method to improve conviction rates and ways of achieving this.

Project Sapphire was introduced in 2001 and is the Met Police's new approach to improving rape investigation and victim care⁴⁷. The Met's current priority is to promote reassurance among victims of sexed violence using the DB and cold case investigations. ‘Cold-case review is now an established area of work within Project Sapphire. The review team re-opens unsolved stranger sexual assaults, utilising the forensic advancements in DNA techniques to identify suspects. By doing this, Sapphire can arrest and prosecute sexual offenders who have, so far, evaded justice. This sends out a clear message, not only to offenders, but also to reassure victims’ (MPS Annual Report 2004/05:31). Project Sapphire has also conducted Forensic Awareness training designed to encourage the maximisation of forensic opportunities at scenes of crime and the need to handle evidence with exceptional sensitivity to avoid cross-contamination (MPS 2002). New early evidence ‘modular’ sexual offence examination kits have been re-designed by the FSS. ‘The kit makes things less stressful for the victim and improves the integrity of the evidence collected’ (FSS 2007).

The NDNAD also has a lot of criminological strength for SV cases as a crime control method. Firstly, is that of deterrence, where offenders may be deterred from committing any crime where DNA could be left⁴⁸. Secondly is defence, to protect victims of all violence where DNA could be collected and used as evidence against the offender. Thirdly, it could help encourage victims to come forward with a charge and to punish criminals effectively and quickly for their crimes. Dr Carole McCartney is a lecturer in criminal law at the University of Leeds and identifies several pluses of the database such as; less reliance on eye witnesses evidence which is flawed⁴⁹; traces offenders quickly without available leads; results in swift detection and helps to ensure convictions (McCartney Presentation 2008).⁵⁰ Furthermore, DNA can link unsolved crimes together, and inform the police to possible suspects, both in stranger rape and familial cases⁵¹. ‘DNA databases are sure to provide a potent tool, especially in sexual crimes, where the perpetrators are often repeat offenders with criminal records’ (Miller 1995:7). However this is not to say that DNA databasing is infallible; science is a progressive undertaking where errors can occur. Therefore DNA evidence is not used solely in criminal proceedings, but is relied upon as a highly dependable source for forensic information.

⁴⁶ The Rape Action Plan was published in July 2002. It made 18 recommendations for action to the police and CPS – measures include improvement of facilities for forensic examination, training for police officers, specialist rape prosecutors, guidance to barristers and special measures for victims in court.

⁴⁷ See chapter 3 for statistics on the success of Project Sapphire

⁴⁸ I will address deterrence theory more in chapter 3.

⁴⁹ More than three-quarters of wrongful convictions examined were the result of a false eyewitness identification (#25 Explore DNA 2008)

⁵⁰ Leary and Pease 2002 also support the DB.

⁵¹ See Chapter 3 for more information on familial testing – using the DB to find the offender by searching samples of potential relatives.

Discourse on crime prevention questions whether DNA databasing is the way forward; asking whether we should assess the causes of SV before attempting such measures to control it. ‘Some argue that money would be better spent tackling social inequalities and the causes of crime’ (The Inquirer 28 June 2008). Alternatively, DNA databasing could be viewed as an infringement of human rights and another way for the state to impose its rules and regulations. In addition, implementing a DNA database on a large scale could be viewed as controlling, positivistic⁵² and hegemonic. Even our understanding of DNA has privileged associations due to the trusted nature of scientific claims⁵³; however despite these issues DNA databasing could still operate in a positive way to help women with regards to SV.

In the future the existence of the NDNAD could encourage women not to be so fearful of reporting their assault because they know the case might have more chance of a prosecution due to DNA match forensic evidence. Ultimately, theorising on the causes of SV does nothing to actively change incidence of this crime or improve prosecution rates, thus the rights of these victims continue to be violated, such as the Right to Freedom from physical/sexual assault as outlined in the National UN declaration on the elimination of Violence Against Women 1994. Although I understand that asking the cause of something is important, I am somewhat against this etiological question because trying to understand criminal behaviour has no immediate effect on stopping or reducing violence. Furthermore theoretical perspectives cannot offer any comfort about today’s crime problem or future, because there are no answers and even more important, no solutions.

With no current means of improving the situation, long or short term, implementation of the NDNAD appears to be an immediately effective system which could also operate to prevent and reduce the incidence of sexual abuse. ‘DNA profiling is a powerful tool in solving many serious crimes and deterring serious criminals. In a typical month, matches are found linking suspects to 30 murders, 45 rapes and 3,200 motor vehicle, property and drug crimes’ (GeneWatch 2005:7). In addition to this, if everyone’s DNA was held in a database, the police would be encouraged and aware of the potential to take the case forward and more guilty criminals would be tried and prosecuted. The DB is not a solution however, but an effective measure and an important factor (among others) in improving prosecution rates.

Critics of the database see it as a coercive measure for political hegemony, however the database should therefore be viewed as a positive aid to break down and challenge the hegemony and masculinities inherent in the law, whilst also being a part of the criminal justice system. This may appear contradictory, yet I am not unaware of the limits or ironies of reformism. Beneficial change can occur in a patriarchal social order and the development of the database is a starting point. The DB is a neutral criminal device which could be viewed as recognising and problematising SV through the utilisation of evidence as power.

⁵² Positivism is a theoretical approach which argues that crime can be studied scientifically using methods derived from the natural sciences. Its aim is to search for, explain and predict future patterns of behaviour using ‘empirical’ truth. In criminology it straddles biological, psychological and sociological disciplines in an attempt to identify key causes of crime – whether genetic, psychological, social or economic – which are thought to lie largely outside of the individual’s control. It has been scrutinised as denying the role of human consciousness and meaning in social activity and preventing an over-determined view of human action. Feminists are against the denial of agency which positivism entails. It is the empirical science behind the DB – DNA evidence as truth – which can be viewed as positivistic. This has negative connotations because it denies the existence of other truths and possibilities.

⁵³ There is an issue of the Prosecutors Fallacy which applies to the use of DNA evidence in court and this will be further discussed in chapter 2.

The NDNAD could initiate change on a technical level. Ultimately, however, rape must be delegitimized as an acceptable act. Collecting DNA for a database may be considered a coercive measure, but it is also a necessary measure. The perpetration of SV is not acceptable. The *cultural script* has to change; any man who commits an act of SV should know that their crime will not go unpunished. Feminist writers⁵⁴ point to what the state has *omitted* to do as much as what it *does do*. Thus, it is not so much a case of *over-regulation* but the *under-regulation* of crimes against women, for example, in areas of domestic and SV. Therefore, I would argue that the NDNAD could be used as a regulatory resource for SV.

Consistent use of the NDNAD against a backdrop of growing international concern about VAW, would instil confidence in the CJS by the UK population and the police force alike. The police have been held responsible for the poor prosecution rate in cases of SV but this could change; the NDNAD may encourage the pursuit of forensic evidence in all complaints and this may promote a change in attitudes through an educated understanding and encourage acceptance of the DB.

DNA identification is not always necessary in cases where the rape victim is known to the offender, but it still remains essential to help prove presence and the incidence of a sex act. Ultimately investigation into whether the sex act was consensual or not is down to the police and jury, and this is where the CJS faces cultural issues. Therefore the DB can only contribute partially to any rape prosecution success. I would argue that any contribution is beneficial and thus the use of the DB for this end should be encouraged.

Conclusion

The difficulties of proceeding with a complaint of rape through the CJS are gradually being acknowledged and the Government has implemented measures to improve these difficulties, but there are so many problematic areas, including the police. The NDNAD can be viewed as a measure, which may help evidential issues and confront the hegemonic masculinity within the law that has so far misrepresented the serious issue of SV. Rapes are qualitatively the most important offences to bring to justice. Furthermore, rapists are likely to offend in the same way for the rest of their lives (BBC Panorama 2006).

Ultimately, rape claims face two main issues in court; lack of evidence and issues of consent. Whilst the NDNAD cannot directly tackle consensual issues in court, it can provide powerful forensic opportunities which could make a significant difference to the poor prosecution rate. It could also instil confidence into those who felt subjugated by the law, and the police.

As of now, the police have not been able to use DNA evidence effectively because the offender was protected by his legal invisibility, which I will discuss in the next chapter. With the growing collection of DNA profiles, the solving of crimes and elimination of suspects will be greatly improved. However, the concept of privacy hinders consent for DNA sampling and the development of the NDNAD. Before the terrible and damaging crime of sexed violence can be tackled respectively, the importance assigned to privacy must be transposed so that this progress within the CJS can continue.

⁵⁴ Hester, M., Kelly, L. Radford, J. (1996) *Women, Violence and Male Power*. Open University Press. Buckingham.

2) Analysis of critiques on the database

I will begin this chapter with a synopsis of the relevant legislative changes which have occurred to facilitate the establishment of the NDNAD. I will then explore the implications of various criticisms on the NDNAD from human rights groups such as GeneWatch, the media and The Nuffield Council, and counter arguments to these objections. The recommendations made by some HR groups may hinder progress of the DB through societal influence and regulation. I will argue that the progress of the NDNAD is necessary for beneficial crime control and I will conclude the chapter with defences from The Home Office and Rights of Women for corresponding analysis.

Legislation

Before 2001, the police could take DNA samples during investigations but had to destroy the samples if the people concerned were acquitted or charges were not proceeded with. The Criminal Justice and Police Act 2001 amended⁵⁵ the Police and Criminal Evidence Act 1984 (PACE), removing this requirement (so long as the samples had been lawfully taken).⁵⁶

PACE was further amended by the Criminal Justice Act 2003 to allow the police to take DNA samples and fingerprints without consent, from all persons arrested for a recordable offence⁵⁷. Thus it is not now an offence to take DNA without consent. 'These changes broadly reflect the recommendations of the RCCJ⁵⁸ – the Royal Commission on Criminal Justice' (Elliott & Quinn 2007:367). Another factor contributing to this decision was the exculpatory uses of DNA data for exoneration in criminal cases.

The Criminal Justice Act introduced in 2004 allowed police to take DNA and retain it indefinitely from anyone arrested and detained. By 2005 DNA was taken as a matter of course in all cases. In 2006 The Serious Organised Crime and Police Act⁵⁹ came into force and made almost every crime an arrestable offence.

⁵⁵ The legislation changed following two cases which demonstrated the potential value of the retention of profiles on the Database. The two cases (R v B and R v Weir) were the overturning on appeal of the convictions of a rapist and a murderer despite DNA evidence that linked the defendants to the offences. The convictions were quashed by the Court of Appeal on the grounds that the DNA evidence should not have been admitted. The defendants had been identified through their DNA profiles being retained on the Database for earlier offences when they should have been removed. This caused considerable public concern and the law was subsequently changed to allow profiles to be retained on the Database. (FFS Press Release 2007:6)

⁵⁶ The Police National Computer (PNC) is used to record the associated demographic information enabling a link to be made to associated DNA and Fingerprints. This in turn provides the necessary link between DNA and, or fingerprints recovered from a crime scene and the suspect (FFS Press Release 2005)

⁵⁷ In order to link these samples to an individual, the police need to keep a demographic record on PNC (FFS Press Release 2005)

⁵⁸ It was set up in 1991 to examine the penal process from start to finish

⁵⁹ Section 64 of PACE restricted use of the DB to purposes related to the prevention or detection of crime, the investigation of an offence or the conduct of a prosecution. Where a person died of natural causes or as a result of a disaster such as the tsunami in South East Asia at the end of 2004, it was therefore not possible to use the DB to help identify the deceased person's body or body parts. This position was remedied through implementation of subsection (7) of section 117 of the Serious Organised Crime and Police Act 2005 (SOCPA), which amended section 64 of PACE to enable profiles from DNA samples taken from any deceased persons to be checked against the DB for identification purposes, irrespective of whether there is any suspicion of their involvement in a crime. This amendment to section 64 of PACE came into effect on 7 April 2005. (H.O Annual Report 2005:9)

On 4 December 2008, the European Court of Human Rights found in the case of *S and Marper* that the blanket policy in England and Wales of retaining indefinitely the fingerprints and DNA of all people who have been arrested but not convicted was in breach of Article 8 of the European Convention on Human Rights. The decision was based on the inadequacy of certain safeguards, too broad an access to data and insufficient protection against misuse or abuse (H.O Press Briefing 2009). However, the ECtHR agrees with the Government that retention of fingerprint and DNA data ‘pursues the legitimate purpose of the detection, and therefore, prevention of crime’ (H.O Press Briefing 2009). This is a key point in the judgment and reflects the recognition by the Court of the importance of DNA and fingerprints in helping to detect offenders and bring them to justice.

Nevertheless, the ECtHR ruling means that the law in England, Wales and Northern Ireland will have to be changed to be consistent with the judgment and destroy the DNA and records of people who are acquitted or have had charges against them dropped. The details of how the judgment will be implemented have still to be worked out, but on 7 May, the Home Office published the public consultation paper ‘*Keeping the Right People on the Database*’⁶⁰. This allows for public and parliamentary debate on the issues raised by the ECtHR decision until the law is changed in 2010. I will discuss these proposals in chapter 4.

Prior to the ECtHR ruling, changes to legislation⁶¹ legitimated the NDNAD and removed its association with unfair practice. ‘Surveillance activities in the past were unregulated, which may have been a breach of the European Convention on Human Rights which protects the right to privacy [Art.8]. DNA collection is not considered an intrusive surveillance technique similar to bugging, intercepting communication and covert investigation (Elliott & Quinn 2007:370). Despite this current academic opinion, the ECtHR still decided that DNA retention *is* intrusive to one’s rights. I maintain that it is for crime prevention and identification purposes only, for the benefit of criminal procedure, and not intrusive to one’s rights.

GeneWatch has been critical of the changes in legislation that occurred prior to the ECtHR ruling because there was insufficient public or parliamentary debate. They have argued that ‘standards relating to police use of DNA data have been effectively reduced in every state to the lowest standard operating in any of them’ (Staley 2005:26). Similarly the Human Genetics Commission say that the database has not been subjected to sufficient debate, either in parliament or amongst the public, and the reasons given for retaining DNA profiles are not compelling (HGC NDNAD Working Group 2008). The Home Office publicised changes in the law, only after the legislation has been updated and this does not maintain transparency. However, there have been many criminal cases solved due to the implementation of the NDNAD. If it wasn’t for these legislative changes (or apparent lenient restrictions⁶²), there would not have been so many successful detections and prosecutions⁶³. Arguably this is a pragmatic justification, not a moral one but it is an achievement which should be recognised.

⁶⁰ Home Office, May 2009. *Keeping the Right People on the Database*. Science and Public Protection consultation paper. The Government also introduced an amendment at Commons’ Report Stage of the Policing and Crime Bill for the introduction of regulations on the retention, use and governance of biometric data.

⁶¹ Provisions such as the Police Act 1997 and the Regulation of Investigatory Powers Act 2000.

⁶² It is recognised that the UK has less restrictive data protection laws, as far as criminal justice investigations are concerned, than most other countries. (Home Office Seminar Report 2005:35)

⁶³ I will outline several case study examples in chapter 3

Other criticisms surrounding legal policy on the database include volunteer samples and research. The NDNAD is unique in the sense that consent is not revocable and this is contrary to most medical practice. ‘Most volunteer samples are obtained from victims, third parties or a member of a population identified for an intelligence-led screening, for elimination purposes in relation to the investigation of a specific offence. Profiles are only added to the NDNAD if the person provides separate written consent’⁶⁴ (H.O Annual Report 2005:30). The Association of Chief Police Officers has advised that records should only be removed in exceptional circumstances, such as if the arrest or sampling was unlawful, or where it transpires that no crime has been committed⁶⁵ (ACPO DNA & Fingerprint Retention Project 27 January 2006).

The NDNAD is compliant with the Data Protection Act, however exclusions apply to any research related to criminal behaviour or crime prevention, therefore some external companies can have access to the samples⁶⁶. Access to samples or data on the NDNAD is strictly monitored for research into ‘crime’ only and for development purposes⁶⁷. These requests are channelled through the Custodian to the NDNAD Strategy Board who reject the majority of requests on the grounds that they cannot see any police need for the service (H.O Annual Report 2005:43). It is important to be robust in using data protection to help detect crime as opposed to using it as a barrier to the exchange of information (H.O Seminar Report 2005:35). However, the opportunity for criminal related research will be seriously hindered by Home Office proposals to reduce the retention period of DNA samples to six months. This allows only a small window for further study and will also prevent information getting into the hands of an insurance company or other interest – though that was never likely.

Criticisms by GeneWatch

GeneWatch UK does not oppose the existence of the NDNAD, noting its usefulness for law enforcement, however they ‘believe that the current operation of the NDNAD does not strike an appropriate balance between the rights of the individual and the interests of the public’ (Staley 2005:47). It has lobbied against its rapid expansion under the current Government from about two million individuals in 2002/03 to around four million

⁶⁴ The process of giving a sample to help an investigation, and for the sample to be retained, is separate. But once consent is given, it cannot be withdrawn, unlike in Scotland.

⁶⁵ Retention of DNA is a contentious issue, particularly in light of recent cases such as S & Marper who won their appeal through the EctHR to have their fingerprints and DNA profiles removed following acquittal. See chapter 3.

⁶⁶ Scientists have begun to be granted permission to use the database for research related to crime prevention. One of the strategic developments proposed in the DB 05-06 report is to ‘encourage opportunities to derive more intelligence information from the Database’ ((H.O Annual Report 2005:1). This is concerning because the specific intelligence is so ambiguous.

⁶⁷ Requests are occasionally made to the police, or suppliers of forensic science services, for access to a DNA sample taken under PACE or provided voluntarily, or for the profile from such samples held on the NDNAD, to assist with determination of the paternity of a child in civil cases. Use of the samples or profiles for this purpose is expressly prohibited under the terms of section 64 of PACE ((H.O Annual Report 2005:9)

Furthermore, the Government’s announcement in the Genetics White Paper in 2003 that the Human Tissue Bill would introduce a new offence of testing an individual’s DNA without their consent followed a Human Genetics Commission recommendation to change the law to prevent non-consensual genetic testing, including paternity testing. The HGC therefore welcomed section 45 of the Human Tissue Act 2005, which made it an offence to have DNA for the purposes of analysing DNA without consent. This change in law is clearly set out in the Human Tissue Authority’s code of practice. (FSS Press Release 2006)

individuals in 2006/07. Director Helen Wallace of GeneWatch stated ‘no DNA should be kept from someone who is not a convicted criminal’ (Daily Mail January 21 2006).

In January 2005, a report compiled by GeneWatch reviewed the concerns about the NDNAD, emphasising the importance of privacy. ‘While there is no doubt that society does have an interest in the detection and prevention of crime, this cannot be used to justify every infringement of the individual’s right to privacy and the loss to our civil liberties’ (Staley 2005:47). GeneWatch believe that DNA databasing is an infringement to privacy. They aim to halt further development of the DB because of the *potential* threat of future misuse. This is despite *actual* crime detection and control benefits, case examples of which they add to the report to convey ‘balance’. However, unfounded ideas that we should be fearful of DNA information are also sown into the report, ‘there are fears that this information may be misused in ways that threaten our individual rights’ (Staley 2005:5). My contention to this is on two levels. Firstly is that there is no current misuse of DNA profile information, and secondly, DNA profiles do not contain enough information to infringe upon one’s privacy⁶⁸. GeneWatch places exceptional and unjustified value upon DNA as the source of one’s privacy⁶⁹.

GeneWatch also point out that a match on the database does not guarantee a conviction. Past Home Office estimates have said that half of all matches to the database lead to a detection (The Register 29th June 2008). According to GeneWatch, just one out of every eight DNA matches leads to a conviction and custodial sentence; however this figure is still a valuable contribution to prosecution success⁷⁰. I argue that it is because the DB is not extensive enough, that the number of DNA profile and crime scene matches has not significantly increased (see chapter 3).

Although the report highlights several case study examples of DB success, this is not the focus. There are no statistics in the paper which identify the problematic extent of SV, so an informed decision cannot be made in relation to this crime. I argue that it is precisely through the indefinite storing of data and further growth of the system, that victims of violence will benefit most. This is because many cases struggle to prosecute without forensic evidence and DNA match information is essential prior to the suspect interview and helps to ensure a guilty verdict. Therefore the DB could improve conviction rates. This potential justice for victims of SV is an acceptable balance against the small infringement to our privacy. Criminal conduct places a higher and continuing threat to society, than the operation of the NDNAD. The issue of SV is an actual, frequent occurrence, but the feared and predicted flaws of the database are yet to be realised and are not the central problem.

GeneWatch makes several recommendations for tighter controls on the NDNAD. Firstly, DNA profiles (except samples from the scene of a crime) should not be retained once an investigation is complete. ‘The purpose of *retaining* an individual’s DNA profile on a database (as opposed to collecting it) is to treat them as a suspect for any *future* crime’ (Staley

⁶⁸ Although the ECtHR has ruled that profiles interfere with the right to private life because it is possible to identify genetic relationships with STR information (CASE OF S. AND MARPER v. THE UNITED KINGDOM 4 December 2008).

⁶⁹ I will challenge concerns, such as privacy and *technologies* of fear in chapter 4. See Foucault’s analysis of technologies; people as vehicles of understanding and power.

⁷⁰ The National Policing Improvement Agency has said it is not possible to give a number of convictions secured with DNA because people cannot be convicted on DNA evidence alone (The Inquirer 28th June 2008).

2005:48). I reject this assertion because it does not confront potential recidivism⁷¹, or allow for easy detection of an offender with a previously clean record.

I also reject the following recommendations by GeneWatch;

- The personal data and DNA profiles from people whose charges have been dropped, or who have been acquitted, should be removed from the NDNAD (unless they were connected with a serious violent or sexual offence);
- DNA samples should not be taken until a person has been charged, unless needed to help prove or disprove a suspect's involvement in a *specific* offence;
- The database should *not* be expanded to include the whole population;
- People's personal data and DNA profiles should not be kept indefinitely on the database [except when they have committed serious violent or sexual crimes] (Staley 2005:9).

Conversely, I *propose* that data should be stored indefinitely; that data should be taken from anybody (regardless of whether or not they volunteer); and that the DB should expand for improved profile and crime scene match success.

Although the recommendations are not rules, and do not have the power of legislative influence, they do have power on legislative decisions through discourse. This has been proven by the ECtHR judgement which has ruled against permanent DNA retention. The discourse within the GeneWatch report is similar to journalistic rhetoric⁷² and subjective because the language is deployed to obscure meaning and incite fear. For example; '*threats* to genetic privacy', '*capacity* to reveal personal information', '*possibility* of false matches'. This language is emotive because 'possibility' becomes 'certainty' and 'could' becomes 'will'. GeneWatch even associates DNA databasing with a form of punishment; 'Innocent people should not have to pay any penalty to the state, no matter how small that penalty is.' (GeneWatch 2005:38) Whilst the NDNAD is not abused in a negative way, and remains restricted for crime control, it should not be considered a penalty to the public.

This is not to deny that DNA evidence is fallible and so it should be used with caution, as is the case with all evidence. Therefore some recommendations, which are not detrimental to SV crime detection, should be adopted to improve the system and provide constructive prevention of abuses. Therefore the following three recommendations I *do* support;

- An independent body should be set up to review all future applications to access the data and samples for forensic and non-forensic purposes; to ensure standards are maintained; and to ensure public accountability and transparency;
- An 'Innocence Project' should be established to investigate possible miscarriages of justice using DNA;
- An independent review of whose DNA data should be sampled and retained is urgently needed (Staley 2005:8).

⁷¹ Sexual offenders are likely to be recidivists and frequently leave biological evidence Simoncelli 2004:3
Recidivism accounts for approximately 75% of criminal activity((H.O Annual Report 2005:14)

⁷² Article author Sue Reid attacks db's existence using hyperbolic terms such as: 'chilling, worrying twist, staggering, Big Brother technology, 'labels the blameless as well as the guilty, atmosphere of growing public anger, sordid reality'. This is unnecessary (Daily Mail January 21 2006)

GeneWatch also recommend that 'only DNA profiles and personal data need to be on the database to find a 'match' for a criminal investigation' (Staley 2005:8). There is a distinct difference between a digitised DNA profile and a biological DNA sample. To summarise the contentious debate, you *cannot* find out everything about a person from the DB *profile*. A profile is a numerical code derived from a DNA sample⁷³, usually collected in the form of a buccal swab. This profile does not contain any usable information about an individual except whether they are male or female. It serves simply as a code by which an individual can be identified. The profile is used to match individuals recorded on the database to samples found at crime scenes⁷⁴ (HGC NDNAD Working Group 2008).

The NDNAD holds the person's name, date of birth, ethnic appearance, gender and information about the police force which took the sample. This is sufficient for the police to be able to contact the person if required and the Police National Computer (PNC) holds the person's postal address. The ethnic appearance is recorded to help identify a person in case other details are wrong⁷⁵ (NPIA Dispelling DNA Myths 2008).

Unlike DNA profiles, which contain little genetic information, the *biological samples* themselves are retained and stored on the DB post analysis by suppliers, for quality assurance purposes. It is also possible to carry out further analysis of a biological sample to obtain or infer additional information (such as a person's eye colour or whether two samples come from people who are members of the same family). This further analysis, for purposes other than criminological, is prohibited by laws and not routinely carried out in police investigations at present (HGC NDNAD Working Group 2008). It has been suggested that there would be better control of the samples and public reassurance if the samples were to become the responsibility of the Custodian once a successful analysis has been obtained⁷⁶. (H.O Annual Report 2005:22) The Nuffield Council states that 'electronic retention of fingerprints and DNA profiles is much less contentious than the retention of biological samples and incurs very little cost (P10 Nuffield executive summary). I *agree* that the storing of a sample, which contains more information than the simple profile required to detect and prosecute an offender, is unnecessary and details about health and genetic disposition are currently irrelevant to crime control. The Home Office proposal to destroy samples after six months will resolve this issue although I would argue that this retention period is problematic and too short. Furthermore any developments to profiling techniques, i.e. SNPs, will be seriously affected to the detriment of the DB.

⁷³ The analysis process looks at non coding regions of DNA. They do not indicate any defining characteristics other than gender, and cannot be used to make any determinations as to the health or appearance of the individual. Some chromosomal abnormalities may be indicated during the analysis process, but this information is not recorded on the NDNAD profile (NPIA Dispelling DNA Myths 2008).

⁷⁴ Both the sample and profile are routinely kept, although the terms under which this occurs differs within the different jurisdictions within the UK. (HGC NDNAD Working Group 2008)

⁷⁵ However the Nuffield Council argue that 'ethnic inferences for DNA should not be routinely sought by police. There are ethical and practical problems associated with this technique, and the information it provides has limited usefulness (Nuffield Council 2007 Summary).

⁷⁶ Since 1995, it has been the responsibility of the laboratories that analysed the DNA samples to store them afterwards under secure conditions specified by the Custodian that will ensure their long term viability.

The samples can thereafter only be used for purposes related to the prevention and detection of crime, the investigation of an offence or the conduct of a prosecution. Within these constraints they are also used for quality assurance and error investigation purposes defined by the Custodian, and for specified research approved by the NDNAD Strategy Board (H.O Annual Report 2005:22)

GeneWatch has sensationalised the potential for DNA databasing misuse without highlighting the difference between a sample and profile. The argument against the DB is therefore not logical because GeneWatch did not focus their contention on sample information.

The beginning of the report states that, 'GeneWatch UK hopes to encourage and inform society's deliberations on these difficult sensitive subjects' (Staley 2005:5). However the report is heavily weighted against the DB despite its valuable technological addition to crime detection. I am against the persuasive nature within the report and feel that the public should have access to more objective sources of information, other than the subjectivity of HR groups. GeneWatch mistrust authority and their basic modes for argument are flawed, not only because the language incites fear, but because their agenda is biased.

Although the ECtHR judgement is yet to be enshrined in law, GeneWatch still urge people who believe their DNA records are held unfairly to continue to contact the police to seek removal from the database. Dr Wallace said, 'it is unacceptable to treat everyone who is arrested as if they are a rapist or a murderer' (GeneWatch Web 2009). This is a very strong, sweeping statement. Who, indeed, are *treating* people on the DB in this way? Not the police. Any data stored on the DB is merely data until it is put into context. No-one is treated as criminal by being on the DB, unless further investigation is required after a match. It is a criminological tool, for exoneration and identification purposes.

The Council for Responsible Genetics in the USA, which publishes a Newsletter called GeneWatch, has also condemned the Advancing Justice through DNA Technology Act which allows for the permanent retention of DNA data in CODIS⁷⁷. They portray the system of criminal investigation as a wide surveillance conspiracy. Firstly they are concerned that a case should never hinge on DNA evidence alone; 'cold hit cases are more prone to error because the suspect rests solely on a DNA match and alternative explanations for that match may be nearly impossible to argue' (Simoncelli 2004:6). However this is why a re-test is always conducted for confirmation and could also induce a guilty plea⁷⁸. 'Tony Lake said an ethics committee is being set up and safety checks are factored in so that DNA is not relied on solely in criminal investigations' (The Independent On Sunday May 7 2006).

Secondly they argue that, 'storing DNA from unsuspected individuals in a criminal database undermines presumptive innocence' (Simoncelli 2004:4). Although I do not feel that DNA storage is anyway associated with guilt, I would argue that the discourse needs to change; it does not have to be deemed a criminal database, although the Home Office regularly refers to the database as containing DNA of the country's known active criminal population' (Northampton Herald & Post May 19 2005). This reference has since changed to an intelligence database because the former terminology inferred criminality. In addition, a presumption of innocence is still possible within a court of law due to thorough police investigation and the trial process in general.

Finally, 'permanent retention of juvenile offender information is in sharp contrast to the long-standing principle of rehabilitation in the juvenile justice system' (Simoncelli 2004:4).

⁷⁷ CODIS is the Combined DNA Index System in the USA.

⁷⁸ A non-intimate DNA sample (cheek scrape or hair root) taken under PACE from a suspect arrested, charged, reported or convicted for a recordable offence is primarily for intelligence purposes only. This CJ sample gets added to the NDNAD. A further sample is required for evidential purposes, however in exceptional circumstances, if a separate evidential sample cannot be obtained and it is in the interests of justice, the Chair of the National DNA Database Board may authorise its use for evidential purposes.

On the contrary, DNA retention could encourage rehabilitation through the deterrence risks of getting caught re-offending. Arguably retention of DNA data does not mean rehabilitation is unattainable.

Liberty makes several heavily biased claims against the DB which are expressed in a similar fashion to GeneWatch⁷⁹. *Liberty* object to the regime of permanent retention of DNA taken from people arrested for any recordable offence, even if no charge follows because ‘it ignores both the risks of human error and costs for human privacy and dignity’ (Crossman 2008:1-2). Legal director, James Welch says, ‘it is highly dangerous to keep the DNA of those who have not been convicted because it is a mark of their criminality’ (Daily Mail January 21 2006). They have welcomed the ECtHR's decision (BBC News 4 December 2008).

Liberty has also stated that ‘any decision not to assist the police should not, of itself, raise any suspicion that they are implicated in the crime’. (Northampton Herald & Post May 19 2005).⁸⁰ I object to human rights activists who defend the actions of any man refusing to co-operate with the police when they are trying to locate an offending rapist. It is a requirement in UK law, as a UK citizen, to co-operate with the police.

Interestingly however *Liberty* have acknowledged that ‘the consistently low conviction rates for sexual offences caused by victim vulnerability, complex issues around consent and so on raise real proportionality arguments about possible retention from an earlier point in the process’ (Crossman 2008:2). Therefore there is some support from *Liberty* for the retention of DNA from persons who have not been charged, because they can recognise the severity of low conviction rates in SV cases.

Academic opinion & media impact

Nick Clegg, Liberal Democrat home affairs spokesman, said there was ‘no earthly reason’ why someone who has committed no crime should be on the database (BBC News UK 5th September 2007) Professor Sir Alec Jeffreys has recently voiced concerns of a ‘mission creep’. Initially ‘the mission’ of the database was to store DNA from criminals only; ‘when it was established, it was to database DNA from criminals so if they re-offended, they could be picked up. Now hundreds of thousands of entirely innocent people are populating that database and this could undermine civil liberties. (BBC News 01/11/06).

Jeffreys’ concern about a ‘mission creep’ is somewhat contradictory however because his further support for a global database was never an intention of the *initial mission* but is a logical development, similar to the retention of all DNA data. One suggestion is to ‘put everyone's DNA fingerprint on it, but ban any data on race, health or physical appearance, and such civil liberties' abuses will be avoided - provided proper security controls are implemented’ (The Observer 8th August 2004).

⁷⁹ Welch fuels fears that employers could one day access your data on the DB, but this is not a possibility. *Liberty* claim that ‘DNA is the most intimate material; it can be used to identify who your parents are, and indicate your life expectancy’ (The Mail on Sunday, September 16 2007). Furthermore, ‘if a sample is added to the database, it can then be used to find out what illnesses they might have or be predisposed to’ (Northampton Herald & Post May 19 2005).

⁸⁰ Similarly, McCartney argues that non-consent raises suspicion and therefore mass screens are not voluntary because ‘voluntariness’ is lost (Presentation 08).

Importantly he is not so much against DNA testing, but of police being overzealous with the spread of data collection. Essentially the concerns are about power and how it can be misused. ‘There is no concern to be raised over police access to boring STR’s⁸¹. However police should not have access to the private genome. Furthermore, it is important for police to use a combination of evidence and not rely solely on the identification sought from DNA profiling’ (Jeffrey’s presentation 2007). Dr Carol McCartney has expressed similar concerns to Jeffreys about the NDNAD⁸². McCartney says that the DB could affect the process of trial in the UK because guilty pleas have risen with DNA evidence, ‘the police don’t even have to do any police work now and this rings alarm bells. It may cause tunnel vision where police only investigate a suspect identified by the DB and ignore other evidence’ (McCartney 2008 presentation). Thorough investigation is still necessary because a DNA match does not automatically mean presence.

The distress voiced by Jeffreys over the DB has a negative impact on public perception because he is not a critic of the forensic community, but the pioneer of the NDNAD. In 2007, Jeffreys support for the CRIMINAL database was still 100%⁸³. However In regards to ECtHR ruling in December 2008, ‘he condemned the government response to the court ruling as minimal and disappointing. There is a presumption not of innocence but of future guilt here ... which I find very disturbing indeed’ (Sturcke, J. 7th May 2009).

The media aggravate concerns by insinuating that Jeffreys has become Frankenstein. ‘Meet the DNA genius who fears the dark side of his discovery’ (The Observer 8/8/04). In addition, the suggestion that the vast database of gene profiles could be put to ‘far more sinister uses by governments even more overweening than the current lot’, is especially ominous (BBC News 01/11/06). The media is also very successful in sensationalising assumed facts; ‘The first 20 years of DNA fingerprinting may have been sensational, but the next 20 years are likely to be incendiary’ (The Observer 8/8/04).

The media⁸⁴ employ ‘slippery slope’ and ‘the thin edge of the wedge’ arguments to attack the DB. This holds that if we allow a database holding DNA information to operate, then we will inevitably go on to more intrusive ways of controlling crime, similar to a snowball effect. However, the wedge is a socially constructed, weak argument⁸⁵. It is flawed because there is no wedge yet. This feared ‘Orwellian future’⁸⁶ is not an actual, living reality, therefore the wedge is incomplete and elusive⁸⁷. There may never be a ‘fat edge’ of the

⁸¹ Short Tandem Repeat – current method of extracting a DNA profile – also identifies kinships.

⁸² However McCartney does not support a mass database however and says, ‘I am against a global database because there are too many risks and there is no evidence or proof that it would work. I have always been suspicious of the DB and my suspicions have grown as the restrictions have been loosened’ (McCartney Presentation 2008).

⁸³ ‘Yes, I support 100% the CRIMINAL DNA database’ Lipscombe, S., slipscombe@uclan.ac.uk. 2007. *The National DNA Database*. (Email) Message to Jeffreys, A., (ajj@leicester.ac.uk). Sent Friday 23 February 2007 15:43.

⁸⁴ Spectator, The Register, Mail online, Scotsman.com etc

⁸⁵ The wedge itself could be that of a moral panic as will be discussed in chapter 4.

⁸⁶ *1984* by George Orwell depicts a futuristic vision of Britain where the totalitarian rule of the Party is maintained by permanent and omnipresent televisual monitoring. The inhabitants are constantly reminded of the power of the state to monitor them by posters declaring ‘Big Brother is Watching You’. Similarly, *Brave New World* by Huxley is dominated by the scientific totalitarianism of human clones and psychotropic drugs which maintain compliance.

⁸⁷ This theory is similar to that of the Gateway model in drug use. It states that use of softer, more socially acceptable drugs such as marijuana, alcohol and cigarettes will lead onto more dangerous use, such as cocaine and heroin. However there is no research clear enough to validate these claims and it is not a

wedge, and ultimately, despite potential problems, there currently remain high levels of success.

The Nuffield Council on Bioethics:

The Nuffield Council on Bioethics produced a report in 2007 which addressed the ethical issues of the DB and legislation on the storage of DNA material. They are against the extension of police powers to store bio-information without consent from people arrested for 'non-recordable' offences, which include littering and minor traffic offences⁸⁸. They want the law in England and Wales to be brought in line with Scotland where they only keep the DNA profiles of convicted criminals. They state that:

'The authority to *take* (for impending use in criminal investigation) biological samples without consent from those who are arrested on suspicion of involvement in any recordable offence is proportionate to the aim of detecting and prosecuting crime' (Nuffield Executive Summary 2006: P6).

However 'the authority of the police to take and *store* biological samples from all arrestees without their consent, regardless of the reason for the arrest, is disproportionate to the aims of identifying a person and of confirming whether or not a person was at a crime scene' (Nuffield ES 2007:P7).

Therefore, the permanent retention of profiles and samples can only be justified as proportionate for those who have been convicted of a recordable offence, with the exception of people charged with serious violent or sexual offences. 'In all other cases, samples should be destroyed and the resulting profiles deleted from the NDNAD'⁸⁹ (Nuffield ES 2007:P11)

'The Scottish practice of allowing retention of samples and profiles, for three years, from those charged with serious violent or sexual offences, even if there is no conviction, should also be followed. Thereafter the samples and profiles should be destroyed unless a Chief Constable applies to a court for a two-year extension, showing reasonable grounds for the extension' (Nuffield ES 2007:P12).

reliable argument; 'there is no conclusive evidence that the drug effects of marijuana are causally linked to the subsequent abuse of other illicit drugs' (Joy, Watson & Benson, 1999 Marijuana and Medicine: Assessing the Science Base, Washington, DC, National Academy Press).

Other research by WHO & CASA supports this view; 'the theory that marijuana use by adolescents leads to heroin use is the least likely of all hypotheses.' (Hall, Room & Bondy, 1995 WHO Project on Health Implications of Cannabis Use. Geneva, Switzerland).

According to CASA (National Centre on Addiction and Substance Abuse), 'there is no proof that a causal relationship exists between cigarettes, alcohol, marijuana and other drugs. Basic scientific and clinical research establishing causality does not exist.' (Merrill & Fox, 1994 Cigarettes, Alcohol, Marijuana: Gateways to Illicit Drug Use. NY, Columbia University).

⁸⁸ Suspicion of involvement in a minor (at present 'non-recordable') offence does not justify the taking of bio-information from individuals without their consent (P7 Nuffield Executive summary).

'We recommend that the list of recordable offences for which fingerprints and biological samples can be taken from arrestees, should be rationalised so as to exclude all minor, non-imprisonable offences' (P6 Nuffield Executive Summary)

⁸⁹ Volunteers, including victims and witnesses, should be able to have their DNA removed from the National DNA Database at any time without having to give a reason. (Nuffield Council 2007 Summary)

I contend that this would be a frequent and expensive eventuality, yet it seems that the cost of the DB is a concern⁹⁰. Furthermore, although the report begins by highlighting the difference between profiles and sample, they still argue that retention of profiles is just as bad as retention of samples due to personal implications. Indeed this is vague. I argue that storing the DNA profiles of victims and suspects who are later not charged or acquitted is necessary and justified by the need to fight crime for exclusion and prevention. Importantly however they recommend that, 'because crime scene samples are unique and unrepeatable, they must be retained indefinitely' (Nuffield ES 2007:P14) and I would agree that it is necessary to 'prioritise the collection of bio-information from crime scenes, rather than individuals' (Nuffield ES 2007:P13) for increased DB success.

Hugh Whittall, Director of the Nuffield Council on Bioethics, said, 'we agree wholeheartedly with the ECtHR ruling. Storing innocent data indefinitely is unacceptable but a proportionate approach which considers the evidence is a better policy. DNA evidence is extremely important in many areas of criminal justice, but more evidence is needed about the contribution of retained profiles and samples. The Government now has an obligation to bring its own policies into line' (Nuffield Council Press Release 2008).

The Nuffield Council said that the database should be reduced in size because it was 'unjustified' to keep people on the DNA database who have not been convicted of any offence. The study coincided with the former Prime Minister, Tony Blair, announcing that there should be no restrictions on the number of DNA profiles held on the National DNA Database to help fight crime. It has been predicted that 25% of the male population and 7% of the female population will soon be represented on the NDNAD. (HGC Website 2008) Professor Sir Bob Hepple QC, Chairman of the Nuffield Council said the central issue was whether the UK would 'become instead of a nation of citizens, a nation of suspects' (BBC News 1 November 2006).

The Home Office says that the number of samples from black males is disproportionate to the make-up of the UK population. Professor Hepple said, 'certain groups such as young males and ethnic minorities are over-represented on the database, and the Council will be asking whether this potential for bias in law enforcement is acceptable.' Some estimates say that more than three-quarters of young black men currently have their profiles on the database, as opposed to less than a quarter of white men of similar age (HGC Website 2008). Figures compiled from Home Office statistics and census data show almost 40% of black men have their DNA profile on the database. That compares with 13% of Asian men and 9% of white men. 'Ever-expanding numbers of black and ethnic minorities stored on the database will exacerbate and perpetuate discrimination' (The Independent On Sunday May 7 2006). It would therefore seem logical and fair if everyone was included on the DB so that bias against ethnic minorities can be eliminated and this will be discussed in chapter 3.

Significantly, numbers in prison are also disproportionately male, ethnic minorities and so focussing on this apparent 'flaw' within the DB is not really an argument against its use, but a fact of the CJS in general. The DB takes on the character and parameters of policing and the system itself as it reflects those going through the CJS. Tony Lake, chief constable of Lincolnshire Police and chairman of the DNA board said 'any imbalance in the number of black and white youths whose DNA is stored on the database reflects disproportionality in the Criminal Justice System rather than an inherent problem with the database' (BBC News 5th

⁹⁰ I.e. the storing of digitised DNA profiles would be less expensive than the current system.

September 2007). There is bias in the legal system but the DB is 'reactionary', not causal and any attacks on its implementation are perhaps misplaced. The legal system designed the DB to consult crime control, not the race divide. Whether the data on the DB is misrepresentative or not, it does not condone or perpetuate the issues in the CJS. Or at least, no more than the courts perpetuate policing of racial groups. Although the DB is a new system, it is an extension of the CJS, and the question of whether any new system could beat the race divide is beyond the scope of this dissertation.

Another concern raised by the Nuffield Council is the prosecutor's fallacy of probabilities. The error in the prosecutor's argument arises out of the confusion of two conditional probabilities, given that some information is known. For example, the probability that it is dark, given it is midnight (fairly certain), is different to the probability that it is midnight, given it is dark (possible, but not certain). Similarly, the odds that someone is innocent, given forensics found a match, is completely different to the odds that forensics will find a match, given someone is innocent⁹¹. Clearly it is the former of the two that matters when determining a guilty verdict. If a jury confuses the two, they have fallen for the fallacy. Juries have been led to believe that the very small probability of an innocent individual having a DNA profile that matches that found at the scene of a crime is the same as the probability that the person standing trial is innocent. The unresolved problem is how to stop juries and lawyers making a range of errors of reasoning like the prosecutor's fallacy if they do not understand the mathematics. A mathematical area known as Bayesian Probability Theory gives an accurate way of calculating the correct odds. However the courts have ruled that such complex mathematics should not be presented to juries as it could lead to miscarriages of justice for other reasons. It is therefore essential to educate juries on the prosecutor's fallacy so that it can be prevented and probabilities must be explained in simple terms⁹².

Further to this, statistics presented in court are particularly persuasive as evidence. However precise figures are difficult to surmise because other factors impact on probability, such as alibi, locality etc. Therefore the statistic is confused in the minds of the court (judge and jury) when considering the evidence because the statistic bears more weight than other factors which should be considered.

⁹¹ The Sixth Form College Colchester *Online* – The Mathematics Department – The Prosecutors Fallacy. Available at: <http://www.colchsfc.ac.uk/math/dna/discuss.htm> [Accessed 24 September 2009]

The error in the prosecutor's argument arises out of the confusion of two conditional probabilities

(1) The probability that a DNA sample taken from an innocent person matches that found at the murder scene GIVEN THAT the person is innocent.

(2) The probability that a person is innocent GIVEN THAT their DNA sample matches that found at the scene of the crime.

The first probability is saying that 1 in 50 000 people have a DNA sample like that found at the scene of the crime. Thus if an innocent person is tested there is a 1 in 50 000 chance that their DNA sample will match. Notice that in the prosecutor's summing up he in effect claims that the probability that the defendant is innocent is 1 in 50 000. In other words, he is claiming that the SECOND probability described above is 1 in 50 000. This is NOT the case.

⁹² Professor Norman Fenton and Dr Martin Neil of the RADAR group have developed models that can be used to present the implications of complex mathematical arguments about odds in legal evidence in a way that is understandable to the general public. These models are then run using tools and techniques developed in close collaboration with the company Agena Ltd for assessing risks generally. If their approach is adopted by the courts it could help prevent innocent people being jailed. See Fenton, NE. & Neil, M. 2000. The Jury Observation Fallacy and the use of Bayesian Networks to present Probabilistic Legal Arguments. *Mathematics Today* (Bulletin of the IMA) 36 (6) pp. 180-187.

Some cases have occurred where the analysis of DNA has proved unsuccessful as with the case of Andrew Deen, which exposed the prosecutor's fallacy, allowing further criticism of DNA profiling⁹³. However Jeffreys finds that 'fortunately, the scientific principles underlying DNA fingerprinting are not complex. Experience has shown that judges, lawyers and juries can readily understand the issues involved, a process which is greatly helped by the relatively simple and pictorial nature of the evidence'⁹⁴ (Jeffreys 1993).

In the case of *R v Cooke* [1995] 1 Cr App R 318 – The significance of DNA evidence outweighed the value of the appellant's privacy. The judge was correct in saying that he would not have excluded it on the grounds of fairness. 'Fairness to the proceedings is not the same as fairness to the defendant. The fact that; in law there may have been an assault on the appellant ... did not in any way cast doubt upon the accuracy or strength of the evidence.' The courts are usually very wary of allowing evidence obtained by breaching the law to be admitted, however here was a strong endorsement of DNA as reliable evidence⁹⁵.

Ultimately there is more weight given to DNA evidence than other forensic information⁹⁶. 'Proponents of the database argue the great benefits that DNA evidence has brought to criminal investigation, though, as always, they over-egg the infallibility of both science and those applying it' (Chakrabarti, S. The Independent on Sunday May 7 2006). I would respond to this comment by highlighting that similarly, opponents to the DB 'over-egg' the danger to human rights. Furthermore the significant weight ascribed to DNA evidence is because the chance for error is small; 'The probability of the DNA profiles of two unrelated individuals matching is on average less than 1 in 1 billion (1,000,000,000) so the danger of accidental matches is not that high' (POST 2006). Although the prosecutor's fallacy should encourage careful evaluation of evidence in court, and better education⁹⁷ on DNA profiling, in

⁹³ In December 1993 the appeal court quashed the conviction for rape of Andrew Deen pending a retrial on the grounds that the forensic scientist who gave evidence against Deen at the original trial had misrepresented the statistical evidence. The scientist incorrectly defined match probability and stated that the probability that the DNA of an innocent man would match the sample collected at the scene of the crime was 1 in 3 million and had then gone on to say, in effect, that the probability that Deen was innocent was therefore 1 in 3 million (*R v Deen* [1994] The Times January 10th 1994).

In Swindon a man with Parkinson's Disease was arrested, and charged with a burglary in Bolton. He was frail and had never been there. But his DNA sample - it is claimed - matched one taken from the crime scene. Eventually the Crown Prosecution Service (CPS) admitted that he could not have done it. (BBC Programme Panorama 2007 *Give us your DNA*)

⁹⁴ STRs are sorted out according to size. By labelling them with radioactive probes a mono images is made which produces a unique bar-code. It is then possible to establish kinship patterns as a mother and father will pass on their bar codes to offspring (The Observer 8th August 2008).

⁹⁵ This is about the law being fair however the issue of consent here is problematic. The law should respect the value of consent...Unless, denying this value (right) would be for the benefit and/or interest of society. Denying a woman's right to consent would not be for the interest of society. The law can sometimes operate to preserve interests that are masculine in essence and detrimental to society. This is not an example of that; quite the opposite. See further analysis of these issues in chapter 3.

⁹⁶ 'English law has no specific requirements regarding the admissibility of scientific evidence other than the fact that such evidence should be relevant and must not infringe any exclusionary rule. The scientific evidence is put before the court and it is for the jury, assisted by expert evidence, to assess the appropriate weight to give to the evidence. The courts should ensure that the defence are able to obtain an independent assessment of the evidence' (Steventon 1993:37) Things have to be fair & equal otherwise trust in DNA as evidence will be diminished.

⁹⁷ 'DNA results mean little without expert interpretation. Comprehension of techniques and terminology is essential' (Steventon 1993:26) 'The manner in which DNA statistical evidence is presented can make a difference to juror decisions' (Schklar & Diamond 1999; Koehler 2001; cited by Briody 2002:176) Therefore, more subjective, attainable, public education is essential, both to experts and jurors.

the majority of cases, the bio statistical evaluation of DNA is justified. Despite the scientific and statistical support for DNA evidence there are alternative matters raised by Foucault, Gavey and Bogard⁹⁸ who object to the undisputed power ascribed to science and surveillance, which see positivism as problematic.

Society and the courts accord science great deference and respect because when a scientist testifies in court, he is often viewed as an impartial and objective expert reporting the indisputable facts of science to us. If a forensic scientist tells us that it is 100% certain that an individual was present at a crime scene and has the blood of the victim on his clothes, this may be decisive in an otherwise tenuous case. This places great responsibility, but also great power, in the hands of a scientific witness. 'Today we accord forensic DNA evidence such a role, but it was hard earned and is well deserved. Trust, but verify, is the watchword' (Zabell 2005:178).

Police error

Campaigners for women's rights have criticised police responses as inadequate and incompetent. Mark Campbell evaded justice for four years after he was first arrested because police failed to link his DNA to earlier offences. A police spokesman said that changes to the law surrounding DNA samples, as well as new procedures, would prevent the error being repeated (The Times 16th October 2007). In the case of Rachel Nickell, DNA evidence which could have identified her killer was missed by the FSS. Furthermore, an official report showed that the FSS missed specks of blood that eventually led to the conviction of Damilola Taylor's killers (This is London 17 May 2007).

A review held in 2005 identified 183 crimes went undetected for up to 11 years as 26,000 DNA samples were not added to the national database between 1995 and 2004 (This is London 17 May 2007). 90% of the 26,200 load failures occurred after the NDNAD was linked to the Police National Computer (PNC) in 2001. After the link was created, new NDNAD records were routinely checked against the PNC and, if they were found to be erroneous, were rejected (The Register 17 May 2007).

Mistakes like this undermine the integrity of the DNA database. Liberal Democrat spokesman Nick Clegg said, 'with such a lack of transparency or competence, is it any wonder public scepticism about the vast ID database continues to grow?' (This is London 17 May 2007) A spokesman for ACPO said, 'procedures have since been strengthened to ensure that all forensic laboratories deal efficiently with load failures. The DNA Database Board

⁹⁸ Foucault sees positivism as powerful and this is why we or 'I' comply, despite them being naïve and 'beneath the required level of cognition or scientificity.' Foucault's genealogies are precisely anti-sciences and work to remove the production of truth through power. *I.E Foucault would not accept the NDNAD.* Foucault says 'that it is surely necessary to question ourselves about our aspirations to the kind of power that is presumed to accompany such a science' (Foucault 1997:59).

Gavey sees that scientific method is not privileged to have any superior access to knowledge and truth as it is in mainstream psychology because 'knowledge is transient and inherently unstable – there are few, if any, universal truths' (Gavey 1989:21). Bogard develops a theory called the 'telematic society' where electronic data is continually produced and then taken to be 'reality' by dominant institutions. Modern social control is about the simulated notions of order and disorder. 'Social relations are reduced to a space between keyboard and the screen. People are known and situated only as they are reproduced in the hyper-real space generated by electronic data banks, electronic communities or genetic algorithms. It is surveillance without limits' Bogard, W. (1996) *The Simulation of Surveillance: Control in Telematic Societies*. Cambridge University Press. Pg 102

carefully monitors load failures by forensic suppliers on a quarterly basis.’ The Home Office said Ministers had spent the past five months establishing the scale of the problem and putting it right⁹⁹ (This is London 17 May 2007). The Data Quality and Integrity Team of the NDNAD Unit have since dealt with the forensic service firms' backlog¹⁰⁰. ‘The load failure rate for DNA samples has been wheedled back to its current 1%’ (The Register 17 May 2007). Objection to ‘all the crimes that have been missed’ due to these errors must mean that there is recognition of the value the NDNAD has for criminal detection, therefore the media is contradictory.

The Home Office also disclosed that 27,000 files on Britons convicted overseas had not been put on to the PNC (The Times 16 October 2007) and a further 10 per cent of records on the DNA database, which contains about 4.1m records, are duplicates¹⁰¹ (The Register 17 May 2007). ‘GeneWatch UK warned the database is getting out of control in terms of safeguards and the number of people on it. DNA was not foolproof, with victims of mistaken identity being wrongly targeted’ (The Independent On Sunday May 7 2006). The replicates repository consists of groups of 2 or more matching subject sample profiles. The DQIT has compared the matching profiles in each group with the PNC and to date has found 2,056 false/dual identities, 1,392 pairs of identical twins¹⁰² and 2 sets of triplets. This has allowed the police to merge and consolidate their information on the individuals who have previously provided false information, and by updating appropriate PNC records this will ensure that the police are aware of existing identical siblings during their investigations (H.O Annual Report 2005:41).

The Nuffield Council says that the risks of mistaken identification result from relatively rare cases of flawed science (P3 Nuffield Executive Summary). Generally concern about the reliability of techniques used to extract a profile are unwarranted because the chance of an identical match between the DNA sequence taken from two different people is less than one in a billion if they are not related (Staley 2005:14). Therefore it is highly reliable and a more stringent form of evidence than has ever been available before.

Contamination of samples also pose a risk to the integrity of the NDNAD and it is possible to get false matches if the DNA profile is incomplete due to degradation; however this is rare now because the testing is so thorough. The Police Elimination Database contains

⁹⁹ In order to prevent any recurrence of this situation, all suppliers that process subject samples for police forces in England and Wales are now required to send to the DQIT a weekly list of their sample profile records which have failed to load to the NDNAD. The DQIT checks these against PNC and returns the required information to suppliers to assist in their resolution and resubmission of the load failures in a timely manner. (H.O Annual Report 2005:42)

¹⁰⁰ Around 20,000 of the samples have since been added to the database, after the missing information was obtained. (This is London 17th May 2007) The remaining 5,000 samples could not be loaded on to the database, for legal, technical and geographical reasons. The remaining records are subject to discussion between the FSS and those forces that took the samples, as to whether the records should be resubmitted for loading (H.O Annual Report 2005:40)

¹⁰¹ These are records that have identical DNA samples as other records on the database, but different identifying information

¹⁰² The media has exacerbated concerns over the reliability of duplicated DNA profiles; ‘Police can’t stop crime twins as they have the same DNA. ‘Officers say that even though they have witnesses and DNA evidence, these are useless as only fingerprint evidence would enable police to tell one from the other’. (The Mail on Sunday March 19 2006)

‘It has become an oft-repeated axiom that there is a 37million-to-one chance of someone unrelated to you possessing the same DNA profile. But statisticians say that, in reality, more than 80 per cent of people have a DNA ‘twin’ who is not from their family’ (Daily Mail January 21 2006)

the DNA profiles of personnel who might be in a position to inadvertently contaminate items required for DNA analysis¹⁰³. DNA profiles developed in casework for the NDNAD can then be checked against these contamination elimination databases as a precautionary measure (H.O Annual Report 2005:41).

Various serious errors have encouraged police forces to implement massive improvements to observation and communication, to prevent any similar future injustices. The Nuffield Council said that it is important to ‘ascertain ‘best practice’ within policing to maximise the crime control potential of bio-information’ (P13 Nuffield executive summary).

The strategic objectives in the NDNAD 05-06 report include; ensuring compliance with all relevant legislation; protecting the DNA samples and information on the Database from unauthorised access and improving the systems for minimising and rectifying erroneous information on the Database (H.O Annual Report 2005:1). Significant emphasis has been placed on improving the integrity and quality of the data that is collated and disseminated in relation to DNA, to ensure that public confidence in DNA profiling and the NDNAD is maintained. This has involved stringent monitoring of police forces and supplier laboratory performance in collecting and providing these data. In particular, forces and suppliers have been encouraged to work more closely together to reduce the incidence of load failures when profiles are submitted to the NDNAD, to reduce the loading of replicate sample profiles to the NDNAD and to improve the quality of data recording in relation to coding of ethnic appearance (H.O Annual Report 2005:12). No doubt the proposals set out by the Home Office to change retention periods and delete data after set time limits will cause future problems and replicate loading of samples.

The NDNAD is fallible and has caused problems, but any DNA testing errors have not lead to a conviction in the UK. I am not purporting to show that the DB is not fallible and I do not believe that any other academic claims that it isn't. However faulty DNA evidence is more a consequence of human error and oversight, than mistaken identity contained in the genetic material itself. ‘The fundamental issue is not the ‘uniqueness’ of the object under scrutiny but the accuracy of the process used to extract features and analyze them’ (Zabell 2005:177)¹⁰⁴. According to many forensic scientists, DNA profiling is already,

¹⁰³ The police, sampling kit manufacturers and supplier laboratories have developed databases of profiles of staff working in their areas who could be the source of contamination, and the supplier laboratories have begun to develop databases of profiles of unknown origin which they have recognised as contaminants. The Custodian DNA/Quality Advisor facilitates cross searches between the separate supplier databases of un-sourced profiles from negative controls and profiles previously demonstrated to have arisen as a consequence of contamination. Suppliers are also actively seeking to expand and share their databases of profiles from their consumable manufacturers, but this is proving difficult due to legal constraints and employment law issues in the countries where the consumable manufacturer is located. (H.O Annual Report 2005:41) Therefore it is hard to ensure error is reduced when laws hinder this process.

¹⁰⁴ It is often asserted that fingerprints are unique. This is really asking the wrong question. A comparison to a similar issue in the interpretation of DNA evidence is instructive. Before DNA evidence is introduced in court, an expert sometimes states that every person's DNA (except that of identical twins) is unique to that person. Such a statement is true, but also misleading. The current systems used to type DNA examine only a very small portion of the human genome. It is not the unrealized potential of the entire genome, but the statistical calculations regarding the small fraction examined that informs us about the strength of the evidence. Similarly, the issue in fingerprint identification is not whether the surface of the human finger theoretically contains enough information to permit unique identification, but whether the latent print being used in a specific case is sufficient to arrive at such a conclusion. Of course, the answer to the first

and increasingly will be, the least troublesome and indeed the most respectable area of forensic science. 'According to Professor Saks, it stands head and shoulders above most other forensic techniques because, before it was adopted into the forensic arena, it grew out of rigorous development programmes within twentieth-century academic and industrial laboratories' (Miller 1995:169). Therefore, meticulous standards of procedure and exhaustive cross-checking measures are applied to DNA testing at all stages of development and it now stands as an investigative technique firmly rooted in good science.

Jeffreys says that 'with higher numbers comes the higher opportunity for error. Ultimately it works for the UK population due to its current size' (Jeffrey's presentation 2007). The media encourages these claims; 'DNA is not a crime cure-all. The larger the database, the greater the chance of finding two samples that look the same but are not from the same person' (Daily Mail January 21 2006). However, there has been no research which verifies that the growing database has increased the chance of error. As the number of CJ profiles on the Database increases so will the chances of identifying the individual whose DNA was found at a scene of crime. (H.O DNA Expansion Programme 2005:12) On average each crime detected with DNA results in a further 0.8 crimes being detected. In 2004/05, there were 19,873 directly DNA-related detections and a further associated 15,732 detections. This gave a total of 35,605 detections. (H.O DNA Expansion Programme 2005:15)

Professor Stephen Bain, a member of the NDNAD strategy board, warned expansion would be expensive and make mistakes more likely. 'If the information about you is exposed due to illegal or perhaps even legalised use of the database, in a way that is not currently anticipated, then it's a very difficult situation' (The Register 10th September 2007). Arguably increased DNA profiling does not instantaneously mean an increased number of false matches, in fact, quite the opposite, as tests become more rigorous. The FSS argues vehemently that the scope for error is rare. I would argue that the fallibility of DNA should not cause so much consternation or be viewed as sinister when it irrefutably demonstrates exceptional crime detecting capabilities.

Ultimately, despite potential for human error, the CJS still benefits more from DNA profiling than without, and it is worth adding there were more chances of wrongful conviction before DNA profiling¹⁰⁵. It appears that the ECtHR does not question the quality or reliability of DNA testing, but the scope for abuse. Either way, the limitations of DNA forensic technology and the different sources of error are not the prior concern when weighed up against crime control gains, especially for cases of SV where the conviction rate is so low. The central question is how to improve the DB for cases of SV.

Home Office response to changes in legislation

The Government appreciates that some people may be concerned about building a larger DNA database, particularly where it relates to people who have not been charged. However, it has concluded that 'any intrusion on personal privacy is both necessary and proportionate, to the benefits for victims of crime and society generally, in terms of detecting crime and protecting the public against criminals' (H.O Annual Report 2005:14).

question is not irrelevant because it tells us whether an affirmative answer to the second question is even possible. (Zabell 2005 P163)

¹⁰⁵ See the Innocence Project in the USA and issues around fingerprinting.

Of the 200,300 profiles on the NDNAD that have been retained under the CIPA 2001 and would previously had to have been removed, approximately 8,500 profiles from 6,290 individuals have been linked with crime scene sample profiles from 4,000¹⁰⁶ offences. These offences include 114 murders, 55 attempted murders, 116 rapes, 68 sexual offences, 119 aggravated burglaries and 127 of the supply of controlled drugs¹⁰⁷. DNA samples taken from persons who have been arrested but not proceeded against (under the CJA 2003) have yielded matches with a crime scene from over 3,000 offences, including 37 murders, 16 attempted murders and 90 rapes. (H.O Annual report 2005:36)

The addition of CJ Arrestee sample profiles to the NDNAD since 2004 has brought significant benefits, including direct police savings through speedier investigations, quicker apprehension of offenders, earlier elimination of suspects and greater victim reassurance¹⁰⁸. (H.O Annual Report 2005:14)

Volunteer sampling is seen as an important way of eliminating people and narrowing down the focus to one or two suspects. Liberal Democrat home affairs spokeswoman Lynne Featherstone said that volunteer samples, which may include victims of crime, is 'an intolerable infringement of liberty and personal privacy. There is no purpose or justification for keeping the DNA record of anyone who is not charged with an offence. We cannot be absolutely certain that there will be no misuse of the DNA database. There are no real safeguards in place to control it.' Home office minister Damian Green said, 'If we are to reverse the trend of rising crime in Britain, the police need to have such tools available' (Yorkshire Post Today 29 March 2006). A volunteered sample of DNA is not an infringement of rights, purely because it is a volunteered sample to help with enquiries.

Volunteer sampling is used by a number of countries as an effective tool to reduce wasted investigation time (H.O Maximising Opportunities Seminar 2005:35). At the end of November 2005, the number of persons on the NDNAD who had not been charged or cautioned was 139,463 (including 15,116 volunteers). This is a relatively small proportion, around 4.5%, of the 3,085,705 persons with records on the NDNAD at that time (H.O Annual Report 2005:32).

¹⁰⁶ Note that the '4,000 offences' referred to in the Annual Report appears to be an error: an alternative figure of 13,964 offences was given in response to a Parliamentary Question in March 2006 [House of Commons Hansard 1 Mar 2006 : Column 842W]. The Report (pg 31-32) explains that these estimates are based on a 'retained acquittals' flag used to mark DB records between May 2001, when the legislation allowing DNA records to be retained was adopted, and December 2005, when software for the PNC was modified to allow retention of the corresponding records on the PNC.

¹⁰⁷ All the sources cited make clear that the figures are based on estimates of the number of DNA profiles retained that would previously have had to be removed, followed by a further estimate of the number of matches that have occurred between these DNA profiles and DNA profiles obtained from biological samples (such as blood, hair, semen or saliva) collected at crime scenes (GeneWatch 2008:2)

¹⁰⁸ Some monitoring work has been undertaken by the DNA & Fingerprint Retention Project Team on the impact of arrestee sampling; this was based on data from 12 forces that are fully utilising the new powers. It has been identified that 43% of arrested persons are not proceeded against and 'no further action' is taken. Sampling arrestees who are not proceeded against has yielded over 250 profiles of individuals that have been linked with crime scene samples. These links to earlier offences may never have been made if the power under the 2003 Act to take a DNA sample on arrest had not been implemented. The earlier offences linked to these 250 criminal justice (CJ) arrestee profiles include: four murder/manslaughters, three rapes, six robberies, four sexual offences, five of the supply of controlled drugs and 98 burglary offences. (H.O DNA Expansion Programme 2005:7)

Tony Lake said that there were misunderstandings about the database because it was not a conviction database but an intelligence tool. He said that a large proportion of suspects who were arrested were not taken before the courts because there was a problem with evidence. Parliament had decided that the power to keep the material was proportionate to public safety and so he defends the gathering of data (The Times 2/11/06). A NDNAD record is not a criminal record and contains no information relating to offences or alleged offences which may have led to a person's DNA being taken and loaded onto the database¹⁰⁹ (NPIA Dispelling DNA myths 2008).

The H.O observes the benefits of holding profiles and recognises the value of crime detection since the change in legislation. (This does not mean that the H.O was against the previous laws in force). Any group or person objecting to the change should first consult the results.

Statistics

- In cases when DNA was recovered, the crime detection rate rose from 26% to 40% In 2004/05.
- The annual number of crimes detected where DNA scene-to-suspect links were made quadrupled from 8,612 in 1999/2000 to 35,605 in 2004/05.
- The number of DNA suspect-to-scene matches increased by 75% from 23,021 to 40,169 between 1999/2000 and 2004/05.
- There were over 40,000 database matches in 2004/05
- The number of crimes for which a crime scene profile was loaded almost doubled from around 25,000 in 1999/2000 to 49,723 in 2004/05. (H.O Maximising Opportunities Seminar 2005:17)
- During 2005/06, 715,239 new subject sample records were added to the NDNAD, an increase of 37.25% on 2004/05.
- During 2005/06, 68,774 new crime scene sample records were added to the NDNAD, an increase of 16% on 2004/05. (H.O Annual Report 2005:29)
- For 2005/06, one or more suspect sample profiles were matched with 49,247 crime scene sample profiles. The total represents an increase of 22.6% on the total number of crime scenes for which one or more suspects were nominated in the previous year. (H.O Annual Report 2005:35)

Police now get more than 3,500 DNA matches a month. In 2005-06 scientists made 45,000 DNA matches for crimes including 422 murders, 645 rapes, 256 other sex offences, 1,974 other violent crimes and more than 9,000 domestic burglary offences. (The Times 2/11/06) In 2006/07, 41,717 matches were made and the number of crimes with DNA detection was 19,949¹¹⁰ (GeneWatch 2008:7).

¹⁰⁹ The NDNAD record does contain an arrest summons number (unless the record is for a volunteer) and this provides a link to the National Police Computer. Other information held includes the person's name, date of birth, ethnic appearance, gender and arresting police force.

¹¹⁰ House of Commons Hansard 30 Apr 2008: Column 489W. The DNA database is only important for some of these DNA detections (about half), because for about half of them the suspect was already identified before being entered on the database.

These admirable results achieved via the NDNAD may be halted by the ECtHR judgement via implementation of the ruling. The Home Office estimates that even this package will mean 4,500 fewer crimes each year being detected compared with the current policy of retaining indefinitely the profiles of all those arrested. However Alec Jeffreys dismissed this prediction (Sturcke, J. 7th May 2009). Home Secretary Jacqui Smith said she was disappointed by the European Court of Human Rights' decision and police will continue to apply existing retention policy while we carefully consider the judgement (BBC News 4th December 2008). Chris Sims, ACPO lead on Forensics and Chief Constable of Staffordshire Police said, 'serious public concern must attach to developments which risk diminishing our ability to protect the public and prevent crime' (ACPO Latest News 2008).

New Home Office guidelines following the ruling are not expected to take effect until 2010. ACPO strongly advise that decisions to remove records should not be based on [the government's] proposed changes. It is therefore vitally important that any applications for removals of records should be considered against current legislation (Travis, A. 7th August 2009).

Rights of women

It is important to balance some civil liberty concerns against the purpose of the NDNAD. The vehement objection from human rights groups is about protecting the interests of 'innocent citizens'. However these objections also, inadvertently perhaps, protect the rights of offending citizens. 'If one person extends their rights, it tends to be at the expense of another person's rights.' (Elliott & Quinn 2007:277). I argue that the focus on citizen's rights is ignorant to the rights of victims of crime, and also of women. Women regularly experience the brunt of SV, and as indicated in chapter 1, this crime has yet to be effectively acknowledged or dealt with¹¹¹.

Significantly, 'liberty of a person means nothing to the battered wife' (Elliott & Quinn 2007:284). So whilst it is necessary to consider any invasion of rights through DNA collection and databasing, let's now consider the rights of women by looking at International Human Rights¹¹² and Amnesty International.

Article 1 of The Declaration on the Elimination of Violence Against Women 1994 explains VAW as any act of gender based violence that results in, or is likely to result in, physical or psychological harm or suffering to women, including threats if such act coercion or arbitrary, deprivation of liberty, whether occurring in public or private life. Article 2 states that VAW shall be understood to encompass, but not be limited to: 'physical, sexual and psychological violence occurring in the family'. The Declaration recognises violence as the removal of liberty and I argue that DNA databasing cannot also be described as the removal of liberty when the former is much more blatant and serious.

Crucially the Declaration also recognises violence occurring in the privacy of the home as problematic. 'The foregoing is an acknowledgement that women suffer violence specifically because of their gender and the Declaration's definition encompasses acts

¹¹¹ For more information on Britain's poor record in tackling rape and domestic violence see: End Violence Against Women (2007) Making the grade? The third annual independent analysis of UK Government initiatives on violence against women.

http://www.endviolenceagainstwomen.org.uk/data/files/evaw_mtg_uk.pdf

¹¹² Also the Proposed Convention against Sexual Exploitation 1993

previously designated 'private'. The Declaration thus seeks to end the public/private dichotomy which has characterised human rights thinking' (Wallace 1997:33). I will further develop a theory of privacy in chapter 4.

Article 4 of the declaration demands that states should condemn VAW and pursue by all appropriate means, and without delay, a policy of eliminating VAW. These include:

- d) women who are subjected to violence should be provided with the mechanisms of justice and, as provided for by national legislation to just and effective remedies for the harm that they have suffered
- f) develop, in a comprehensive way, preventative approaches, and all those measures of a legal, political, administrative and cultural nature that promote the protection of women against any form of violence, and ensure that re-victimisation of women does not occur because of laws insensitive to gender considerations, enforcement practices or other interventions.
- h) Include in government budgets adequate resources for their activities related to the elimination of violence against women (Wallace 1997:34-35).

VAW is a human rights violation. 'VAW both violates and impairs or nullifies the enjoyment by women of human rights and fundamental freedoms' (Wallace 1997:108). Amnesty International has launched their global VAW campaign, quoting 'violence against women is the greatest human rights scandal of our time'. The current Home Office policy priority of VAW is a unique time in history where the government has put VAW on its top priority list of crime concerns. The Government is obliged to promote and protect women's human rights and they can be held accountable should they fail to meet these obligations. Irene Khan, Secretary General of Amnesty International said 'each of us have to take responsibility and pledge to end VAW, until it is eradicated (AI 2004 in Campbell 2007:151).

The core principle that human rights are universal, counters one of the most common excuses used to justify VAW, that it is acceptable because it is part of the society's culture. 'All human rights should be enjoyed by all people, and culture or traditions do not excuse the violation of women's basic human rights. (AI 2004 in Campbell 2007:149). This framework creates a common language for the work of anti-violence and public authorities are required to take action because it is a public concern, not just a private concern¹¹³.

Cohen argues that human rights have become a dominant narrative and an important issue, especially through the growth of victimology surrounding the abuse of women and children¹¹⁴. Women continue to have their human rights violated by state sanctioned violence. Although Cohen is against state violations, it would seem acceptable that some HR violations (in association with having your DNA taken and stored) are a fair and equal sacrifice if it would help.

¹¹³ VAW avoids any narrative that reinforces images of helpless victims oppressed by an alien culture because this could be seen to continue imperialism by other means. 'Critics say that the biggest challenge is to understand the origins of such inequality and violence, rather than simply categorising violence against women as a question of human rights' (Clapham 2007:161).

¹¹⁴ Cohen, S. (1996) 'Human rights and crimes of the state: the culture of denial', in J. Muncie, E. McLaughlin and M. Langan (eds), *Criminological Perspectives*. London, Sage.

Conclusion

Laws have been changed to help facilitate court procedure and the current limits on police powers are in place and adhered to. However, various pressure groups have called for tighter controls on the database to lessen the threat to privacy and rights and appear to have achieved their goal as a result of the ECtHR. Criticisms against the DB include issues of permanent retention, innocence, and reliability. Whilst the Nuffield Council argue against a universal database and for additional safeguards, their scientific and rational approach is an acceptable source of information for the public, however GeneWatch is reactionary. It could be perceived that the GeneWatch fight against the NDNAD has gone too far because it is ignoring the important reasons for its existence. The initial reasons behind the set up of such groups were more than understandable because they fought against *extreme* acts of abuse against the vulnerable and marginalised. However, the NDNAD is not extreme in this sense and there are reasons to challenge lobbying human rights groups when concern for living in a stable, crime free society is considered important.

A MORI survey conducted in 2000 found that almost all respondents, 94%, thought genetic information should be used to help solve crime, by identifying and eliminating subjects. However 70% had little or no confidence that rules and regulations were adequately keeping pace with new developments (Pilnick 2002:182). Hope for justice and promise of retribution is matched with doubt over the effectiveness of DNA information and concern over human rights. The ECtHR has ruled that DNA retention is an infringement to Article 8 of the human rights convention, notably the invasion to ones privacy. Unfortunately the removal of DNA profiles from the DB could keep active criminals protected from investigation and justice.

The police need to improve competency around DNA profiling and databasing for it to be a success and this has been a serious oversight. It is essential for police to maintain thorough and professional behaviour in every investigation. Concerns of future research into the connections between genes and race, behaviour and disease, could be met by only indexing DNA profiles and destroying the biological samples, as recently proposed by the Home Office. Ultimately education is essential and I will argue in chapter 3 that the focus should be on how we can improve the database.

The technique of using DNA evidence to corroborate a prosecution case is necessary for successful justice. Ultimately I argue that the crisis situation for women and the poor conviction rates should be a more prior concern to HRs. It seems that the importance of some human rights considerations have surpassed the need to control crime. I argue, from a utilitarian approach, that society should accept that the small invasion on one's rights is a fair price to pay for criminal justice and crime prevention. 'The Home Office said innocent people have nothing to fear from DNA' (The Independent On Sunday May 7 2006). This is echoed by Detective Chief Inspector Katie Elliott from Northampton who says 'their sample will not be used for anything to do with their medical or personal history; it will only ever be used to match offenders with crime scenes. The larger the database, the easier it will potentially be to detect serious crimes. For people who have not committed a crime, having their sample on the database should give them nothing to worry about' (Northampton Herald & Post May 19 2005).

The UK need not fear the existence of crime as well as the way it could be controlled. Perhaps the notion of privacy advocated by pressure groups has become a modern way of attacking state institutions and human rights discourse is ascribing to a privacy narrative which is masculinist. I will discuss these concepts in chapter 4.

Whilst the CJS is struggling to deal with crime, there should be a greater desire to recognise and support systems which could bring about an improved prosecution rate and even a reduction in the prevalence of SV. In the next chapter I will identify several successful case studies to highlight the benefits of the NDNAD for this end.

3) DNA database success and future

In this chapter I will document various case studies, articles and statistical evidence to show how the use of the NDNAD could further improve the current criminal justice system. Cold case examples show the unique value of the DB however opportunities for improved conviction in cases of SV should not be ignored. Furthermore the exoneration powers of the DB and various technical advancements have improved the efficiency of the DB. I will also explore arguments for a national database containing every UK citizen's DNA data, deterrence theory and ways of improving the database so that it can be most beneficial to society.

Fingerprinting & exoneration

The ability to link a suspect to the scene of a crime is already key to crime detection and conviction through the use of fingerprint evidence; however the fallibility of fingerprints has been questioned. 'Recent cases have highlighted concerns about fingerprinting techniques, and there is controversy over the standard required before a true 'match' between a fingerprint found at a crime scene and one taken from a suspect can be declared' (Nuffield ES 2007:2). In 2006, BBC's Panorama compiled a dossier of cases where convictions have been overturned when fingerprint evidence has been shown to be flawed, such as the case of Shirley McKie.¹¹⁵ Critically, not a single case of wrongful conviction has occurred due to DNA profiling.

A study by Dr Itiel Dror at Southampton University questioned the objectivity and scientific reliability of fingerprint evidence. The study found that forensic experts do not always make consistent judgments on whether a print matches a mark at a crime scene, when presented with the same evidence twice. The results concluded that 'the same expert on the same fingerprint can make totally conflicting decisions, depending on the context' (The Guardian 23rd March 2007).

DNA evidence is now the optimum forensic tool for identifying an individual. 'Both law enforcement agencies and the public favour DNA testing as being more scientifically based and more credible' (Zabell 2005:169). This is because 'fingerprint examiners traditionally testify that the evidence constitutes either a 100% certain match or a 100% exclusion, unlike DNA analysis, which gives a statistical probability of a match' (The Guardian March 23 2007). Therefore the scientific process for analysing DNA stands in contrast to the intuitive process for identifying fingerprint matches¹¹⁶.

¹¹⁵ The Scottish police officer Shirley McKie was wrongly accused of having been at a murder scene in 1997 after a print supposedly matching hers was found near the body. Panorama 'Fingerprints in the dock', 2006. TV, BBC1. May 28.

In 2004 Brandon Mayfield was wrongly linked to the Madrid train bombings by FBI fingerprint experts (Guardian 2007).

¹¹⁶ 'In contrast to the scientifically-based statistical calculations performed by a forensic scientist in analyzing DNA profile frequencies, each fingerprint examiner renders an opinion as to the similarity of friction ridge detail based on his subjective judgment' (Zabell 2005:158).

DNA technologies have transformed and revolutionised forensic science¹¹⁷. The DB is now 13 years old and grows by 30,000 samples a month taken from suspects or recovered from crime scenes. 'Serious offences solved by DNA testing have quadrupled since 2000. Every week the national DNA database matches over 1,000 DNA profiles taken from crime scenes with names on the database' (Daily Mail 21st January 2006). 'Home Office Minister Tony McNulty said the database had helped police solve as many as 20,000 crimes a year' (BBC News 5th September 2007).

The first reported case of a DNA-based conviction was in 1987 in *R v Melias*, where a match with a semen crime stain induced a guilty plea (The Times 14 November 1987). The first murder conviction came in 1988 following the rapes and murders of schoolgirls Lynda Mann, in 1983, and Dawn Ashworth, in 1986. Richard Buckland confessed to the attack and Professor Alec Jeffreys collaborated with Leicestershire police to prove that the attacker could not have been Buckland. Jeffreys said, 'I have no doubt whatsoever that he would have been found guilty had it not been for DNA evidence. That was a remarkable occurrence' (FSS 2007 Casefiles). Jeffreys then tested the samples of 4000 local men against the samples found on Lynda and Dawn. In September 1987, it was discovered that Ian Kelly had been asked by Colin Pitchfork to have his blood tested, pretending to be Pitchfork. Pitchfork was immediately sought out, and confessed to the crimes. DNA profiling confirmed his guilty confession and he was sentenced to life imprisonment. Jeffreys said 'it was a combination of technology and good old-fashioned coppers. We became partners' (FSS 2007 Casefiles).

Since this landmark case, DNA swabs taken in minor crimes have pinpointed thousands of rapists and murderers who have evaded capture for decades. The Pitchfork case also highlights how DNA may exculpate a wrongly accused suspect. One of the most emotional and significant legal aspects of DNA applications has been the newfound freedom for those who were wrongly committed of a crime and released from prison following post-conviction DNA analysis.

The Innocence Project in the United States was founded in 1992. It is a national litigation and public policy organisation dedicated to exonerating wrongfully convicted people through DNA testing. It claims 'that with the advent of DNA evidence, we can now know with absolute certainty if a conviction is mistaken'. The first DNA exoneration took place in 1989 and as of August 2008, there have been 220 post-conviction DNA exonerations. The true suspects and/or perpetrators have been identified in 85 of the DNA exoneration cases¹¹⁸ (H.O Website Using Science to Fight Crime). Similarly The Innocence Network UK (INUK) is the co-ordinating organisation for member Innocence Projects based in UK universities. In the pre-DNA era, finding new evidence to establish that a conviction was erroneous was a formidable undertaking. 'It was perhaps inevitable that the solid science of forensic DNA identification would begin to play a role in identifying erroneous fingerprint matches' (Zabell 2005:169).

¹¹⁷ The National Institute of Justice Investigative and Forensic Sciences, 2004 states, 'the success achieved by DNA evidence in the criminal justice system has raised the bar for all forensic disciplines. The criminal justice community, as well as the general public, now carries the same high expectations for all forensic evidence' (Zabell 2005:143).

¹¹⁸ DNA testing allows greater confidence that only the guilty are being executed. This diminishes the force of the argument that the death penalty remains unacceptable due to the risk of executing an innocent human being (Clapham 2007:158).

Successful operations & cold case review

These following examples show how matches between DNA profiles from relatively minor crimes, and samples on the NDNAD, can help the police with their investigations:

Operation Phoenix: In 2003, Mark Wilkinson was found guilty and jailed for 5 years for the rape of a student back in 1996. He was asked to give a routine sample when arrested for urinating in a South Tyneside street. His DNA profile then linked him to the rape (GeneWatch 2005:24).

Operation Flame: £500,000 was stolen during 18 raids on post offices which all followed a similar pattern. Matching samples were obtained from a balaclava found after the first raid and a false number plate used in three of the other raids. A full DNA profile was obtained which matched Alan Motion, whose information was on the NDNAD as a result of a minor domestic incident. A second DNA profile from a safe was also found to match that of John Barlow. Both men were convicted of conspiracy to commit armed robbery and sentenced to 16 years in jail (GeneWatch 2005:24).

Operation Vagabond: John Wood was arrested for stealing £10 of groceries from a supermarket but was subsequently found to be responsible for an unsolved sex attack on two young girls that had taken place 3 years earlier. A profile from the routine DNA sample taken in connection with the theft was found to match a profile from the crime scene held on the NDNAD. Wood's two victims, aged 9 and 11, had been subject to rape and indecent assault. He was sentenced to 15 years in prison (GeneWatch 2005:24).

Enhancements in DNA technology have led to the review and conclusion of many cold case files. These are criminal cases that have effectively gone cold and been closed due to insufficient evidence or information. Whenever new evidence evolves the cases are re-opened to see if the findings will make a difference. 'Research shows that a criminal has an offending cycle of up to 30 years' (Sunday Express May 7 2006). Therefore many police forces across the UK have re-opened cases from as far back as 1975 to try and solve crimes where forensic evidence was available but no database system to make a match successful.

In 2004, the Home Office launched the hugely successful Operation Advance which focused on comparing historic crime scene samples against the DB from rape and serious sexual assault cases. The project was sponsored by the Home Office's Police Standards Unit (PSU), supported by the Association of Chief Police Officers (ACPO) and conducted by the FSS. Aims of the operation are to:

- Re-analyse old undetected crime stains, which were originally examined using the Single Locus Probe (SLP) DNA technique, being upgraded to SGM Plus¹¹⁹, a more sensitive technique that is compatible with the NDNAD;

¹¹⁹ SGM Plus® (SGM+) tests for ten markers known as Short Tandem Repeats (STRs) and a gender marker. STRs are short sequences of DNA that are repeated several times. The number of repeats varies between individuals. A DNA profile consists of 20 numbers and a gender indicator. The probability of the DNA profiles of two unrelated individuals matching is on average less than 1 in 1 billion (1,000,000,000). The discriminatory power of the analysis decreases for related individuals.

SGM, used prior to SGM+, analysed six of the same markers plus the gender marker and had a lower discriminatory power. Some profiles on the NDNAD are based on SGM; 22% of CJ samples and 19% of crime scene samples (FSS, NDNAD Annual Report 03/04). SGM profiles are upgraded to SGM+ in the case of a match. (POST February 2006).

- Use other advances in DNA technology to obtain DNA profiles from samples containing very few cells by the more sensitive techniques available today (FSS Press Release 2005).

It was estimated that there were 215 cases with crime stains that were undetected. Of these, over 90% were serious sexual assaults. A forensic review of these cases resulted in 148 cases progressing, resulting in a named suspect for 39 of the cases following matches against the DB (FSS Press Release 2005).

For Operation Advance II (2005), the PSU and the FSS identified a further 236 cases of serious crimes committed between 1994 and 1999. The DNA profiles in these cases were upgraded to current 2005 standards so that they could be compared directly against the three million suspect and offender DNA profiles held on the DB. As with Phase I, over 95% of these cases are stranger rape or serious sexual offences. To date, the project itself has produced eight convictions with 12 other suspects arrested and awaiting trial. The project has also led to a number of forces independently reopening other unsolved cases and setting up their own review teams (FSS Press Release 2005).

A third phase of Operation Advance was launched in August 2007, with a review of over 4,000 case files for stranger rapes and serious sexual assaults committed between 1991 and 1996. To date, 132 cases with potential for further forensic work have been identified by the FSS. The programme continues to go from strength to strength and has reviewed over 15,000 historic rape and sexual assault cases for further forensic potential. A significant number of offenders have now been apprehended or convicted of serious sexual offences spanning back over 10–20 years. Overall, the cold cases reviewed since this work began have led to the conviction of 38 violent criminals (H.O The National DNA Database 2008:21).

Operation Advance made it possible for Mark Henson to be identified and convicted of the rape of a woman in Nottingham, nearly 10 years after the crime was committed. Crucially, a swab was taken from the victim in 1995 but it was too small for the technology of the time to extract a DNA profile, but it was retained by the FSS. However in 2001 Henson was convicted of the attempted rape of a 53-year-old woman and jailed for life so his DNA profile was loaded to the DB. Then in 2004 the unsolved rape case was selected to undergo a cold case review as part of Operation Advance. Slides containing swabs were sent for Low Copy Number (LCN) profiling which was successful and a DNA profile was obtained. It was loaded to the DB and matched the profile of Henson. DC Steven Wragg from Nottinghamshire Police said, 'we interviewed Henson in prison and when we told him about the DNA sample he admitted it' (FSS Press Release 2005).

In Yorkshire there have been significant breakthroughs, which have revisited dozens of rape cases dating back decades. Detective Superintendent John Parkinson of West Yorkshire police set up Operation Recall in 2006 to reinvestigate cold case sex crimes using latest SGM+ and LCN techniques. So far the Recall squad has a 100% conviction rate.

In November 2005 a 50-year-old builder was found guilty of a murder and rape he committed 27 years ago. He was stopped for drink-driving in 2004 and his DNA matched a sample on the DB taken from the original crime scene. Roland Cole was snared by Operation Recall and interviewed in jail where he was already serving a 5 year sentence for gross indecency with a child and the attempted kidnap of a young girl. He was quizzed about sex offences on 3 children in 1994 after DNA tests linked him with the crimes. Cole admitted the

offences when confronted with the evidence and was jailed for 4 years for his past crimes (Yorkshire Post Today 29 March 2006).

Furthermore Cold Case Sapphire was awarded Partnership of the Year at The Justice Awards in 2007. Since September 2002, the London based scientists have been working in close partnership with the Metropolitan Police and the CPS reviewing unsolved stranger rapes dating back to 1988. 34 men have been convicted of over 60 offences in 42 different cases. Sarah Mustoe, Cold Case Sapphire team leader at the FSS said they are delighted to have received the award, 'by working closely with the Metropolitan Police's dedicated officers and the Crown Prosecution Service, the FSS have achieved conviction rates for cold case rapes of around 84%' (FSS Press Release 2007).

Home Office Minister Hazel Blears said 'the message is clear - people who commit these horrific crimes need to know that these cases are never closed by the police and that they will be brought to justice by this and other new technologies' (FSS Press Release 2005).

Familial testing

A familial search is conducted in rare cases where a DNA sample is not available. 'These are treated as one-off exercises, for the most serious offenses'¹²⁰. (FSS H.O 2005:34) Familial matching was developed by the FSS's Forensic Intelligence Bureau (FIB) and identifies potential relatives of the offender, who are already on the NDNAD, through their DNA profile. It is based on the fact that DNA profiles of those who are related are more likely to contain similarities than profiles from two unrelated individuals. Familial searches can provide two lines of enquiry through the identity of individuals who could be a parent or child of the offender or the offender's sibling.

The results from the familial search are prioritised using other intelligence, such as age, ethnicity and geography. The social assumptions that are made to help prioritise the outcomes from familial searching are stereotypical and pose deeply problematic issues around access to information and interpretation of the role of 'experts'. These are:

- Individuals raised in a family environment of criminal offending are more likely to adopt a similar (criminal) lifestyle.
- Families at the lower end of the socio-economic scale tend to disperse less than families at the higher end of the scale.
- Criminals tend to commit offences either close to where they reside, or at least in areas well known to them (FSS 2004).

The Nuffield Council argues that 'The National DNA Database should not be used for familial searching unless it is necessary and proportionate' (Nuffield 2007 Summary). Each familial search throws up 50-150 possible relatives and about 80 searches are being undertaken each year. The consequence of this is that many individuals might be brought into a criminal investigation on the basis of the familial match. Professor Hepple from the Nuffield Council said, 'If DNA found at a crime scene is not on the database, the police can search for profiles of family members. Whether the police should be intruding into the privacy of families in this way needs to be addressed' (The Times 2/11/06). Furthermore, a genetic link between individuals could be previously unknown to one or both parties and police

¹²⁰ Lyn Fereday, Forensic Science and Pathology Unit, Home Office, UK and Chair of the European Network of Forensic Science Institutes DNA Working Group

investigations may make this information known for the first time¹²¹. Familial searching also risks disclosure by police of the fact that an individual has been arrested to their family members. (Crossman 2007:79).

Ultimately this development in forensics has led to the conviction of violent offenders. It was first successful in 2002 in a case where it subsequently transpired the offender was already dead. Teenagers Pauline Floyd, Geraldine Hughes and Sandra Newton, were raped and strangled in 1973. Despite a huge hunt for the murderer at the time, the cases remained unsolved for more than 29 years. In November 2000, the FSS used DNA profiling to analyse stains from the clothing of two of the girls but failed to find a match on the DB.

In 2002, DNA profiling was used to test items from the scene of the third girl's murder and links between the three crimes were revealed for the first time. Again the NDNAD failed to provide a suspect. Therefore a familial search was adopted to try to find people on the database that might be related to the perpetrator. The search yielded fewer than 100 names. In combination with the intelligence already available, this new information led to a local man, Joseph Kappen, being identified as the prime suspect. But Kappen had already died, so a proxy DNA profile was created by analysing samples from his family members who had volunteered to help with the investigation. The results of these tests confirmed that Kappen's profile was very likely to be a match, which led to his body being exhumed. Subsequent DNA analysis of his remains showed a perfect match with the Scene Of Crime (SOC) samples from all three murders. (GeneWatch 2005:19)

Since then Jason Thomas Ward was charged with the brutal rape and murder of 87-year-old Gladys Godfrey following a familial search in 2003 and Daniel Alderson was sentenced to six years in prison for two separate offences of indecent assault, once close relatives of him had been identified (FSS Press Release 2004). Craig Harman was successfully convicted of manslaughter using a familial search, after he admitted killing lorry driver Michael Little by throwing a brick from a motorway footbridge in 2004 (FSS Press Release 2004). Rapist James Lloyd pleaded guilty in July 2006 to a series of rapes after his sister provided a routine DNA sample following an arrest for drink-driving (Daily Express, July 2006). Northumbria Police used this method to identify and sentence rapist Russell Bradbury in 2006 for an attack from 20 years ago. Cathy Turner from the FSS said, 'It is very satisfying when we are able to use new technology to help police solve a case from such a long time ago, which pre-dated DNA profiling. This case occurred nearly a decade before the creation of the NDNAD' (FSS Press Release 2006).

The sentencing of James Ben Davies resulted from a cross border, cold case investigation using a familial search. Davies committed a string of sexual assaults; the first sexual assault took place in Hampshire 1998, then in 1998 in Cambridgeshire. The third sexual assault in 2000 took place in Northamptonshire. All three offences were linked through DNA but at the time an offender could not be identified. After receiving intelligence generated by the familial search Northamptonshire police prioritised individuals for further intelligence research and, along with officers from Hampshire, Cambridgeshire and Surrey, carried out a number of intelligence led inquiries, leading to his arrest. DCI Tom Manson at Northamptonshire Police said, 'the case is the first of its kind involving familial DNA on a

¹²¹ Jeffreys has identified the dual use of familial testing as part of the 'mission creep', and McCartney believes that 'familial searching could mean guilt by association and this would result in indirect lifelong surveillance' (McCartney presentation 2008).

cross-border investigation involving a number of police forces and should send out a stark message to offenders that you will be caught' (FSS Press Release 2005)

Familial searching has provided a breakthrough into the investigation of serial offenders who operate in different locations and delivers a powerful message to offenders that technology will catch them in the end. Richard Pinchin, head of FIB said, 'the aim is to shorten the timescale between having a DNA profile and a conviction as in that intervening time there may be other incidents' (FSS Press Release 2006).

Managing the transition from DNA left at a crime scene to involvement with the family is important and needs to be done with sensitivity. However, given the severity of SV crimes, I find the perceived seriousness of exposing paternal relations especially problematic and this will be discussed in chapter 4. Unfortunately, the guise of privacy prevents the police from policing violence in the familial home and this is imperative. Indeed I agree that intrusion into family life does need to be addressed, specifically, police *should have* more access to the family home and be able to investigate more efficiently, the daily acts of SV occurring under the familial roof.

Kiszko & Wright

Stefan Kiszko was jailed for life in 1976 for the murder of schoolgirl Lesley Molseed. He spent 16 years in prison protesting his innocence. The prosecution relied upon a confession offered by a bewildered and exhausted man without recourse to a solicitor after two days of questioning by West Yorkshire police, who also denied the company of his mother. He had a mental and emotional age of a 12 year old (The Times 13 November 2007).

A Court of Appeal finally quashed the conviction in 1992 after conclusive evidence was revealed. Lord Lane, the Lord Chief Justice, declared the conviction unsafe after hearing that Mr Kiszko could not have been the source of semen on Lesley's underwear, and thus the murderer, because his condition, called hypogonadism, made him incapable of producing sperm. This wrongful conviction was reported as being 'the worst miscarriage of justice of all time' (The Times 13 November 2007). Kiszko died from a heart attack soon after his release in 1993.

The FSS preserved samples of sperm from Lesley's clothes when they were destroyed in 1985. Scientists were able to subject the evidence from the unsolved crime to DNA analysis in 1999 and came up with the killer's profile, but no name. Then 12 years after Kiszko's release, Ronald Castree was arrested in 2005 and routinely sampled in connection to an unrelated sex attack. Although apparently innocent of the offence, as he was later released without charge, his DNA was retained on the DB and a match to the Molseed murder was discovered during a cold case review in 2006 (The Times 24th October 2007).

In November 2007, 32 years after Kiszko was jailed, Castree was sentenced to life imprisonment for the murder.¹²² The murder occurred before implementation of PACE¹²³ and the NDNAD. Had it been for either of these criminal tools Kiszko would never have been

¹²² This was in spite of attempts to pin the crime on convicted paedophile Raymond Hewlett. Julian Goose, QC, opening for the prosecution told the jury that it was only DNA technology that enabled police to extract the real killer's genetic profile. The match to a swab taken from Mr Castree represented a one-in-a-billion match. The jury trying Castree was repeatedly warned to treat all the evidence including the DNA matches with great care (The Times 24th October 2007).

¹²³ Police And Criminal Evidence Act 1984 – introduced Safeguards.

sentenced in the first place and this serious injustice would have been prevented. Importantly, as indicated in chapter 2, the change in law, the Criminal Justice and Police Act 2001 (CJPA)¹²⁴, also allowed for the retention of Castree's DNA data despite him being released without charge. Had this law not been implemented, then Lesley Molseed's true killer would have remained free to potentially harm again¹²⁵. This case is a perfect example to support permanent retention of DNA profiles and crime scene samples.

The Ipswich murderer Steve Wright was only put under surveillance when DNA from one of the victims matched his profile already stored on the database. 'Wright's DNA was in the database because of a conviction 5 years earlier when he had stolen £80 from a pub where he was working' (The Times 22 February 2008). Before the CJPA 2001 this offence would not have been recorded and his DNA would have been destroyed, but thanks to the NDNAD, Wright was caught and justice was done¹²⁶.

Although DNA evidence was crucial to ensuring his conviction, it was more persistent traditional methods of policing that were most intrinsic to the case. Several methods of investigation were employed to catch Wright such as forensic analysis of fibres, DNA profiling, door to door police enquiry and CCTV footage (The Guardian 17 January 2008). Wright was sentenced to life on the 21st of February 2008. Detective Chief Superintendent Stewart Gull said, 'today's verdicts demonstrate how the combination of traditional police work and information from the public, coupled with cutting-edge DNA science, can be so effective in today's crime investigations' (Yorkshire Post 11 September 2008). Ultimately, if it wasn't for the NDNAD hundreds of cases would never have been solved and just as many criminals would remain free to reoffend.

Crime scene samples

Forensic techniques continue to develop whilst database success encourages its growth. The FSS's latest technique, Pendulum List Searching (PLS), involves the ability to produce a list of potential profiles from a mixed crime scene sample, which can then be speculatively searched against the NDNAD. PLS helped to catch Duncan Edward Turner for a sexual assault in Birmingham in August 2005¹²⁷. This new intelligence tool could be of benefit to up to 4% of all DNA crime scene samples submitted (FSS 22 August 2006).

DNAboost can help separate out mixed samples of DNA. Using pioneering computer-based interpretation systems, the FSS can already handle in excess of 10,000 DNA

¹²⁴ Before 2001, the police could take DNA samples during investigations but had to destroy the samples if the people concerned were acquitted or charges were not proceeded with. The Criminal Justice and Police Act 2001 amended the Police and Criminal Evidence Act 1984 (PACE), removing this requirement (so long as the samples had been lawfully taken).

¹²⁵ The relentless work to unpick Kiszko's conviction, led by his mother, lawyer Campbell Malone and the international group Justice, also inspired many similar campaigns, a lot of them successful (The Register 10th September 2007).

¹²⁶ See Chapter 2 HO response to legislation. 'By the end of 2005, about 200,000 samples had been retained that would have been destroyed before the 2001 law change. 8,000 of these matched DNA taken from crime scenes, involving nearly 14,000 offences, including murders and rapes' (The Times 22nd February 2008).

¹²⁷ A pair of sunglasses were examined from the SOC but they yielded a mixed DNA profile (two or more people detected). PLS works by postulating a ranked list of 500 possible pairs of profiles that could theoretically make up the mixture. It then speculatively searches a copy of the DB with all 500 pairs. If any of these theoretical DNA profiles match any sample on the DB the information is passed on to police for further investigation (FSS 22nd August 2006).

crime stain samples each month and around 50,000 DNA samples from individuals. The throughput enables the company to complete as much analysis in one week as near European neighbours might be able to achieve in a year (FSS 1 December 2006).

Further 'cutting-edge' DNA technology developed by the FSS helped to sentence Peter Voisey to life, for the kidnap and sexual assault of a 6-year-old girl. Three types of DNA testing were used to obtain DNA profiles from complex evidence in the case. FSS Major Crime Specialist Advisor Peter Grant explained, 'current DNA techniques initially only found the DNA of the victim. So the FSS used pioneering Y-STR¹²⁸ testing to target the very small numbers of male DNA cells present amongst an overwhelming number of female cells. This gave a partial DNA profile matching Voisey. The same technique was used on nail clippings, and gave a mixed DNA profile, again consistent with Voisey's DNA being present. The technique of DNA LCN (Low Copy Number) was then used on minute traces of DNA from the victim's skin, giving a mixed DNA profile, which both Voisey and the victim could have contributed to. The final piece in the forensic puzzle came from shoe marks on the bathroom floor. The FSS found 10 marks matching Voisey's trainers, in terms of pattern, pattern size, and wear features (FSS 1 December 2006).

FSS developments of DNA LCN can obtain a DNA profile from just a few cells. It is also known as 'touch DNA' because investigators can extract samples from just 4 or 5 cells deposited by suspects only briefly holding objects such as a gun, a door handle or a glass. The technique was used in the Peter Falconio murder trial in Australia as well as the conviction of the rapist Antoni Imiela, who struck several times in south-east England (The Guardian 11 April 2008).

Conversely there have been various criticisms regarding speculative searching and the particularly sensitive ability of new techniques arouses fear and suspicion. Critics of the DB argue that the identifiers in a PLS profile are still subjective because the process is so complicated. Criminal expert Dr McCartney is sceptical of super sensitive LCN profiling due to its reliance on very few cells and fears this could increase the chance of wrongful convictions and stop critical trials¹²⁹. It is also problematic because there remains the chance of being set up¹³⁰ and even passing on your DNA by shaking hands¹³¹. McCartney asks dramatic questions such as 'can we transfer from innocent person to crime scene despite no direct contact?' (McCartney 2008 presentation).

¹²⁸ Y-STRs are Short Tandem Repeats found on the male-specific Y Chromosome. Since there is no Y-STR in the female evidence the male component will be easily detected. The Y-STR system is especially helpful when there are more than one assailant. The mixed pattern in the evidence can help to identify those males responsible for the assault (DDC Forensics Accessed 2/1/09 <http://www.forensicdnacenter.com/dna-ystr.html>).

¹²⁹ High profile acquittals or quashed convictions have been related to the controversial use of low copy number DNA (Crossman 2008:1) In addition, the speed at which changes and improvements to profiling techniques occur, can pose problems for defence lawyers in the finding of an expert who is able to carry out independent examination of the samples and for the courts in determining when the evidence should be admissible' (Steventon 1993:3).

¹³⁰ Panorama featured the case of a man who was imprisoned for armed robbery but freed on appeal after it was concluded his DNA had actually been planted by a detective from the Metropolitan Police's Flying Squad. (*Panorama Give Us Your DNA*, 1997. TV, BBC1. September 24)

¹³¹ Professor Allan Jamieson, Director of The Forensic Institute in Glasgow, warns that too much trust is already placed in DNA results, 'people put too much faith in DNA'. He explains that finding DNA traces does not always tell you what you think it does. 'We've shaken hands. My DNA will be on your hand. You may touch something outside of this room that I have never touched, and therefore my DNA will be somewhere where I have never been' (BBC News Panorama 2007).

GeneWatch also raise concerns over the dangers of LCN profiling, however the media focuses on the missed opportunities caused by the *absence* of this technique; 'earlier this year, it emerged scores of rapists and murderers could have escaped justice altogether because staff at the FSS did not use the latest supersensitive techniques when testing for microscopic traces of DNA on exhibits between 2000 and 2005. Therefore vital evidence could have been overlooked. The reason the FSS could not use LCN or other supersensitive techniques for testing DNA is because the process had not been sufficiently regulated. However it has since been authenticated and is now considered an acceptable form of evidence which provides exceptional possibilities. As a result, 2,000 unsolved cases where experts were unable to find a genetic fingerprint of the offender have been reviewed' (This is London 17 May 2007).

This technology is extremely admirable, to some, and also creates a sense of security by making our society seem safe and protected by such thorough forensic investigation. LCN techniques are essential for identifying the offender in exceptional cases and should not be eliminated from criminal forensic investigation.

MASS database

There are many arguments for a mass database where every citizen in the UK is obliged to have their DNA stored on an accessible database. In light of the ECtHR ruling, this discussion on mass development of the DB is theoretical, but provides further analysis on how the DB functions. The further development of the DB would address the issue of invisibility and could improve the poor prosecution rates for SV. 'It does not matter how much physical evidence the police have – without a suspect to relate it to – it is of little help to their investigation' (Miller 1995:6). In cases of SV where forensic evidence is usually always available, the offender could be easily identified and arrested, even without a previous criminal record. When considering the Pitchfork murders, Jeffreys said, 'if we had had a global database at the time, we would have got him straight after the first crime. We would have saved a life. That is just one case. Now imagine that repeated thousands of times across the UK' (FSS 2007 Casefiles).

The murder and rape of Louise Smith in 1995 demonstrates how a universal database would benefit crime detection. Despite finding the murderers DNA at the scene and sampling thousands of men, it took 14 months to find him because he was someone with a completely clean record. If there had been a more extensive database it would have taken a maximum of 2 weeks to identify her killer (Panorama 2007).

The Police Superintendents' Association (PSA) has consistently expressed a desire for the creation of a population-wide database. The PSA most recently argued for a universal database in relation to the investigation and subsequent detection of Antoni Imiela, who committed a series of rapes against women and girls. The basis for the PSA's argument is that a database match with the DNA profile obtained from the first of Imiela's victims would have served to identify Imiela as a suspect prior to at least 7 subsequent attacks. Imiela had been previously arrested and convicted of violent offences prior to the series of rapes but the timing of his conviction meant he was not present on the NDNAD. His last sentence, of 14 years imprisonment, ended in 1996, prior to the 'mopping up' exercise carried out by the Home Office (Williams & Johnson 2004:121).

An intrinsic problem with the database is that it is not trans-national. Therefore, convicted criminals from our country would not be caught if they committed a crime abroad,

even though their DNA would be on our database, and vice versa. This was the case with the rape and murder of 13-year-old Caroline Dickinson at a youth hostel in France, 1996, by a Spanish man called Francisco Arce Montes. DNA was left at the scene of the crime and investigators responded by carrying out DNA tests on about 400 males aged between 15 and 60 living in the village and surrounding area. But for years, the French police investigation drew a blank. A US police officer on holiday in the UK read about the crime and the unsuccessful hunt for the killer, and connected the murder to a man arrested for a similar attack in Miami. The policeman followed up his hunch in the US, and Arce Montes was finally extradited from Miami to France in 2001 after a DNA sample linked him to the murder scene in Brittany.

Arce Montes was placed on the suspect list when they found his name connected to an incident in another French youth hostel in 1994. He had also been convicted of several rapes in Germany in the 1980s, and was questioned in Spain in 1997 on suspicion of armed rape (The Scotsman 2004). Police scientists said the Dickinson investigation had convinced politicians of the need for a DNA register. A French white paper proposing the creation of a DNA database was passed by MPs in 1998. But the presidential decree allowing a DNA register of sex offenders was not issued until 2000. However Jacques Chirac¹³² broadened the register to include the DNA of all people suspected of crimes liable to three years' imprisonment in 2004 (The Observer 2004).

Enquiries showed that Montes had been responsible for a large number of sexual offences in many different countries over a period of more than 20 years. Following Dickinson's murder, he was arrested in Spain for an attempted rape, but he skipped bail and the opportunity to obtain a sample of his DNA (and link him to the investigation) was missed¹³³. Montes is a serial sex offender who exploited international borders to gain his ends. He, and others like him, understand the gaps in the system and evade justice by slipping through them. 'As DNA evidence grows as a tool in investigations, individuals such as Montes will focus their predatory activity in geographic areas where they know that the use of DNA evidence is not routine' (Dickinson & Pierce 2005:14). A global database would allow DNA profiles from across the world to be linked and this would prevent trans-national crimes. The FBI are currently looking into a world/global biometric database.

Interpol is the world's largest international police organization¹³⁴. The DNA Gateway was designed in 2002 to assist member states across international borders. It 'provides for the transfer of profile data between two or more countries and for the comparison of profiles which conform to Interpol standards in a centralized database' (Interpol Factsheet 2007). This allows for data matching capacity available to all member states using DNA profiling in law enforcement that is in accordance with their national legislation. DNA profiles can be stored and searched using the Interpol Standard Set Of Loci

¹³² Jacques Chirac served as the President of France from 17 May 1995 until 16 May 2007.

¹³³ The case not only lays bare French reluctance towards DNA tests, but also shows up failings in international police co-operation. French investigators received help from their British colleagues, although Interpol-London failed to follow up on a request for information about Arce Montes's stay in Britain. Spanish police also did not immediately report Arce Montes had a rape conviction there (The Observer 2004). There is clearly an issue here with the trans-national operation of the NDNAD, which needs to be addressed through further research.

¹³⁴ The Interpol DNA Unit was established following the acceptance of Resolution No. 8 of the 67th General Assembly (Cairo, 1998) to advance international co-operation on the use of DNA in criminal investigations.

(ISSOL¹³⁵) (Interpol Website 2008). Profiles submitted to the Gateway are not samples, and as explained in chapter 2, they do not contain any biological information that would affect privacy issues.

In November 2005, the UK followed Austria's lead by becoming the second country to adopt the charter, which governs the usage of the DNA Gateway. With the addition of 13 countries in 2006, the number of countries contributing to the database rose to 42 and there were 65,000 DNA profiles, logging 56 hits in that year (Interpol Annual Report 2006). Currently there are around 77,000 DNA profiles from 47 countries (Interpol Factsheet 2008). Whilst member countries develop their databases, this figure, and the number of profiles transferred on the DNA Gateway is expected to grow as more profiles lead to more hits.

In June 2007 European Union countries agreed to allow police to share DNA and fingerprint data across national borders to assist the detection of criminals who flee abroad to escape justice¹³⁶. Herr Schauble said that Austria had reported 'sensational breakthroughs since it began using the system, reporting more than 1,000 data match-ups in 6 weeks' (The Times 12 June 2007). By 2010 Police in different EU states will be able to set up joint, cross-border operations. Britain has by far the largest database of DNA profiles in Europe, and is therefore likely to benefit proportionally more from the system (The Times 12 June 2007).

Importantly, privacy safeguards have been designed into the Interpol system to the greatest extent possible. A 'hit/no hit' system alerts police when a DNA sample that they are studying matches one held in the database of another EU country; they will then have to request further information. The EU Justice Commissioner Franco Frattini said, 'this will make the EU a safer area' (The Times 12th June 2007). Ultimately the efficiency of this system will work as an effective deterrent for law enforcement agencies across the EU. Furthermore, under current proposals set by the Home Office, the ability to take samples and fingerprints from UK citizens and residents convicted abroad will be made easier/possible (H.O Press Briefing 2009).

Another argument for a mass database is the issue of equality as discussed in chapter 2. President of the Black Police Association Keith Jarrett said the current system was 'untenable' and backed the call for a universal database (BBC News 5 September 2007). Tony Lake, chief constable of Lincolnshire Police and chairman of the DNA board, said 'the DNA of people convicted or arrested for violent or sex offences should remain on the database for life, but that need not be the case for minor offences' (BBC News 5 September 2007). A senior Judge, Lord Justice Sedly, has insisted that the whole population and every UK visitor should be added to the NDNAD:

¹³⁵ The European Standard Set of Loci (ESS) contains 7 STR loci. A profile must have results at 6 of these 7 loci before the request will be processed. In the future all available alleles must be stored in the indexed DNA profile DB in order to raise the accuracy of matches. Each Member State must implement, as soon as practicable, any new ESS of loci adopted by the EU (10+). The higher the number of loci that match, the less likely it is that there is a false match between DNA profiles that have been compared. There are national databases already working with comparisons on the basis of 10 loci (higher number than the ESS of loci) and as a rule they should be compelled to use all loci available (EN 2008:17).

¹³⁶ Until recently, exchanging DNA evidence across national borders took place under the auspices of Interpol. The agreement extends most of the treaty of Prum, a successful police co-operation deal that has so far been signed by Austria, Belgium, France, Germany, Luxembourg, the Netherlands and Spain, to all 27 EU countries.

‘Where ethnic profiling is going on¹³⁷, a disproportionate number of ethnic minorities gets onto the database. It also means that a great many people who are walking the streets and whose DNA would show them guilty of crimes, go free. Going forwards has very serious but manageable implications.... It means that everybody, guilty or innocent, should expect their DNA to be on file for the absolutely rigorously restricted purpose of crime detection and prevention’ (BBC News 5 September 2007).

Tony McNulty MP is the Home Office Minister of State for Security, Counter-terrorism, Crime and Policing. He said Lord Justice Sedley's idea ‘has logic to it - but I think he's underestimating the practical issues, logistics, civil and ethical issues that surround it.’ Mr McNulty denied the current database was unfair but accepted there was room for debate on the workings of the present system, including time limits on the storing of information.

Dr McCartney says that ‘no-one really wants a global DB due to the sheer volume of results’ (McCartney Presentation 2008). Gary Pugh, from Scotland Yard said, ‘more profiles are required to reduce crime further but the notion of universal sampling is currently prohibited by cost and logistics’ (The Observer 16 March 2008). Dr Chris Pounder, a privacy expert with Pinsent Mason’s law firm, pointed out that logistical issues may not be significant. DNA samples could be taken when people are interviewed for an ID card or passport. To avoid the existing DB being used for increasing numbers of purposes an independent regulator should be established in order to ensure that the public trusts the database.

‘At the moment the database is subject to the control of the Home Office, which establishes the ethical considerations as well as controlling those who have access to the database. This is not a firm regulatory structure and my own preference is for a regulator independent of the Home Office who can sort problems out and who reports to Parliament and not to the Home Secretary’ (The Register 10 September 2007).

Such a proposal was made by the Parliamentary Science and Technology Committee in 2005. It said that the independent regulation of any database was essential if the system was to retain the public's trust (The Register 10 September 2007). Although the HO is responsible for regulating the database, this work is overseen by a board which includes The Human Genetics Commission. Currently, Professor Stephen Bain represents the HGC on the DB Strategy Board and keeps the Commission abreast of progress at regular plenary meetings. The HGC are committed to openness and transparency, with particular focus on the social, ethical and legal issues. One of their key roles is to promote debate and to listen to what the public and the stakeholders have to say. Therefore I do not think that the regulatory structure of the NDNAD is either uncertain or biased. Furthermore there are plans to establish an ethics group to contribute and offer advice about research and development, which would include two lay members (HGC 2008). Current proposals made by the Home Office over governance is that the existing NDNAD Strategy Board will be rationalised and have a greater mix of operational and independent members; and an independent panel given the role of monitoring implementation of the regulations and reporting directly to Ministers (H.O Press Briefing 2009).

¹³⁷ In Northampton men of Asian appearance were targeted for DNA samples, but only because they matched the description of the offender (Northampton Herald & Post May 19 2005). Similar issues here to Operation Minstead in London when African-Caribbean men were sampled because they fitted a description. This is not racial segregation but genuine police enquiry into two incidents that happen to involve suspects from an ethnic minority.

Shami Chakrabarti, director of human rights organisation Liberty, said a database for every man, woman and child in the country was 'a chilling proposal, ripe for indignity, error and abuse' (BBC News 5 September 2007). A poll done in 2007 for BBC's Panorama indicated the sensitivity of the issue. One question asked 'should all DNA of 18 years & above be stored?' 66% agreed, 34% disagreed. However when asked if all DNA data should be taken from babies, 66% disagreed, 34% agreed. Although the poll suggests that there is public support for an expanding database to help with the prevention and detection of crime, there are issues relating to the collection of DNA from particularly young children¹³⁸.

The responses from the public are intriguing and wide ranging. 'One surprising statistic is that 42% of the 227 visitors who filled in the survey think that everyone's DNA should be held on the Police National DNA Database' (HGC News 22 September 2008). Maintaining and developing the database is one of the government's top priorities, with government and police investment of over £300million over the last five years. However, there are no plans to introduce a universal compulsory or voluntary, DNA database, and since the ECTHR ruling against blanket retention of DNA data, the potential for a future mass DB is highly unlikely (H.O 2006).

Impact of NDNAD on SV

DNA testing is usually always attempted in SV cases and its presence can make a huge difference to a case reaching court. Considering the current critical level of conviction in SV cases it is therefore essential that the techniques are advanced and the database is efficient. Research in New South Wales (Australia) showed that reporting of sexual attacks had gone down since introduction of DNA sampling (McCartney Presentation 2008) and in the US sex offenders were found unlikely to commit a second crime thanks to improved surveillance¹³⁹. The impact of DNA at trial in the US means longer sentences, however there is not yet any equivalent UK research¹⁴⁰ (McCartney Presentation 2008).

Australian research by Michael Briody found that 'DNA evidence could contribute to the efficiency and effectiveness of the court process in sexual offence cases' (Briody 2002:161). The study examined the effect of forensic DNA in comparison to some other types of court evidence, such as defendant confessions, testimony of independent eyewitnesses and photographic and fingerprint evidence. Although the findings were sourced from Queensland, they 'may well be transposed to jurisdictions with a similar English-based adversarial legal system' (Briody 2002:161).

There were five main findings from the research¹⁴¹. Firstly, DNA evidence makes critical differences in decisions to prosecute after charging so that more cases reach

¹³⁸ The discussion of juvenile retention on the DB is beyond the scope of this dissertation

¹³⁹ In California, just 3.2% of more than 4000 sex offenders released on parole in 2002 were re-imprisoned for another sex offence in the subsequent 5 years. An analysis of the Minnesota statistics suggests that the main factor in reducing sexual reoffending is supervision after release - which has become more intensive in many states. The figures are broadly consistent with a 2007 Minnesotan study, which found that sex offenders are even less likely to reoffend than they used to be: about 5% of offenders released in 1990 were locked up for another sex crime within 3 years but of those released in 2002, the figure was just 1%. Over the same period, re-conviction rates - which were higher than jailing rates since not all reoffenders were locked up - had fallen even further, from almost 17% to less than 3% (New Scientist 2008:6).

¹⁴⁰ Here is an opportunity for further, essential research.

¹⁴¹ Importantly, when both photographic *and* DNA evidence was available, this was found to be 'strongly associated with immediacy of reporting the offence (within 3 days)' (Briody 2002:170).

court. 'A case is more than twice as likely to reach court when incriminating DNA evidence is presented than when it is not' (Briody 2002:170). Secondly, DNA evidence meant that cases were more likely to convict. 'DNA evidence assumed its greatest strength in its influence on jury decisions. A jury was more than 33 times more likely to convict where prosecutors produced DNA evidence than when no DNA results were admitted in evidence' (Briody 2002:170). Furthermore, 'when DNA evidence is combined with other evidence of a recent nature, this improved the chances of a successful prosecution' (Legosz 1999 cited by Briody 2002:170).

Thirdly, DNA evidence was associated with a trend towards imprisonment, 'DNA evidence was a significant but weak predictor of custodial penalties'. Fourthly, DNA evidence emerged as a significant variable at the point of sentencing, by association with more and slightly longer sentences. Peterson et al (1987) offered the explanation as; 'the certainty that the defendant committed the offence, which forensic science evidence sometimes provides, may induce the judge to incarcerate the defendant rather than grant probation or, where incarceration is mandated, to increase the length of incarceration' (cited by Briody 2002:177).

Conversely, although incriminating DNA evidence emerged as a crucial predictor of a guilty finding, 'DNA evidence demonstrated no significant effect in sexual offence cases on inducing guilty pleas' (Briody 2002:170). This finding is contrary to the experience of police forces across the UK and perhaps it would be different with UK sources. 'The implications of this are that expected cost savings through more guilty pleas are not occurring, and will not be realised in sexual offence cases while DNA testing results are provided post hoc to investigators' (Briody 2002:175).

However it was found that when a confession by the suspect is made to police it will act strongly as a precursor to a plea of guilty. 'This study and others pointed to a confession to police at the initial interview as a predictor of guilty pleas. By confronting suspects with incriminating DNA evidence at that time, more confessions might result, followed by a higher rate of guilty pleas' (Briody 2002:175).

This is especially true with the operation of the NDNAD producing 'cold hits' with DNA results in advance of arrests for sexual offences. Confessions at interview were found to be the most important form of evidence for explaining convictions in sexual offence cases, therefore 'in cases of rape, if a suspect made no statement to the police, or refused an interview, the case was less likely to reach court' (Briody 2002:179). This was often found to be on legal advice and allowed time to compile a defence usually based on the consent issue, 'with odds of the jury acquitting improved eight-fold' (Briody 2002:170).

Aside from cold hits, the ability to produce DNA evidence at the point of interview is essential for sexual offence cases which mean that permanent retention of profiles and crime scene samples, and development of the DB to make it larger and more efficient, is vital. 'It could be argued that the DB will assist in solving many more sexual offence cases by providing suspect names to investigators through producing 'cold hits'. However, around 90% of sexual offenders are known to their victims, so that suspect nomination and offender identity are not the issue in most cases.' (Legosz 1999; NSW Department for Women 1996 cited by Briody 2002:178). On the other hand, DNA evidence is still required to prove that a sexual act took place, and this ultimately prevents denial and could still contribute to a conviction.

A concern raised by Briody in this study was cost; 'while DNA typing can be credited with providing greater justice for the community because of its greater accuracy and reliability over the earlier serological techniques, it also places an increased financial burden on the taxpayer through increasing the number of court cases and, it might be imparted, through its association with a larger prison population' (Briody 2002:178).

It is a shame that the failures and costs of the CJS are constantly shadowing the achievement and abilities of DNA evidence and databasing. The UK is an affluent country and extra prisons could be built to counter improved criminal detection and conviction rates.

I would argue therefore, that it is imperative that *every* case is referred to the forensic laboratory by police. Cost savings to the community will only be made once DNA evidence is utilised properly and this will take time. So long as it's growth and development is not heeded I would predict that cost savings are inevitable, however implementation of the ECtHR ruling is likely to create massive further costs. Briody concludes that 'this cost to the community is the price that must be paid for the greater certainty and improved technical accuracy that DNA profiling brings to courts' (Briody 2002:179).

Deterrence theory

DNA databasing is a unique system which could deter criminals of SV (and most other crimes) due to its highly sensitive abilities. The British philosopher Jeremy Bentham developed a theory of deterrence closely related to surveillance and advocated the Panopticon in the nineteenth century as the best form of crime control. The Panopticon prison was never actually built but there remain some similarities between panopticism and crime control techniques used today. The Panopticon allowed for uninterrupted inspection, observation and surveillance.

'Prisoners would never know when they were being observed but would be forced to behave at all times as if they were. A state of conscious and permanent visibility would assure the automatic functioning of self-control and self-discipline' (Muncie 2001:298).

Michael Foucault attacked the concept of Panopticism as an exercise of power. In *Discipline & Punish* (1977), Foucault describes the disciplinary potential of the prison: 'The panoptic mechanism arranges spatial unities that make it possible to see constantly and to recognise immediately. Visibility is a trap' (1977:200). The negative association to visibility is misplaced because a crime cannot be detected unless it is visible, and here it is crucial. Surveillance is not necessarily the negative function of power, it is a technique to catch and prove criminal offences. If populations could be ordered through surveillance then a disciplined society would be beneficial.

The significance of this post-structural Foucauldian perspective is in the transformation of a mode of punishment that depended on the infliction of bodily pain and public theatrical spectacle to one organised around incarceration, regulation and reformation of the mind. 'It is not whether it is better or more humane but how it represents the re-organisation of disciplinary knowledge and power. For Foucault, the techniques and rationales embedded in Bentham's proposed Panopticon were the embodiment of this shift to a new modality of control' (McLaughlin 2001:219). Foucault's historicised analysis can be equated with the Orwellian critique of surveillance and it has a restrictive and destructive nature.

Although Foucault identifies the issue of power and knowledge, Foucault theory fails to recognise and consult the precise issue of dealing with criminality today – especially in relation to sexed violence. The histories and sociologies of control by Foucault largely ignored women. ‘The analysis developed by Foucault would have been much enhanced, allowing for a more nuanced view of the limits and applications of disciplinary control, if its variable application to women as well as men had been considered (Hudson 1996 cited in The Oxford Handbook 2002:255).

Beccaria and Bentham¹⁴² both viewed violation of the law as natural for human beings if they were allowed to do so. ‘To prevent crime society must make punishments for criminal behaviour greater than the pleasures derived from the successful completion of criminal acts’ (McLaughlin 2001:88). Is it therefore natural and acceptable for men to commit acts of sexed violence because the law and CJS alike have not successfully implemented forms of deterrent control?

Deterrence assumes two principal forms and both are supposed to make it clear that crime does not pay. Firstly, general deterrence is aimed at influencing the total population with future or potential criminal activity being prevented by the universal threat and fear of punishment. The existence of the national police database could fulfil this role. Secondly, specific deterrence is targeted at the known offender to ensure that this individual is deterred from further involvement in criminal activity and the use and collection of DNA could achieve this (McLaughlin 2001:88).

The NDNAD does not aim to classify or co-ordinate citizens. It operates more through perceived power than actual force and coercion. The fear and belief in the power of DNA as evidence could be enough to help deter crime and more offenders may plead guilty faced with such evidence. Therefore I argue that this so called operation of power is not negative. However, McCartney says that deterrent arguments cannot be applied to the DB because it is far too complicated and hypothetical. She goes on to say that the concept of deterrence is an intelligent one and many criminals are not rational decision makers concerned about trace evidence, but impulsive and opportunistic people (McCartney Presentation 2008).

Two criticisms of the deterrence focus include the ‘need to develop a considerably more sophisticated theory of human behaviour which explores the internal and external checks on why people do or do not engage in criminal activity’ (McLaughlin 2001:88). This argument is also problematic though because searching for ‘causation’ is not immediately effective for SV victims. Secondly, ‘the labelling process and ‘naming and shaming’ effectively close off the possibility of ‘going straight’ (McLaughlin 2001:88). However people should be made culpable for their actions through the operation of the database.

Future improvements for the DB

Currently reliance upon highly persuasive evidence limits debate and underplays the limitations of, and objections to, the expansion of DNA capabilities. McCartney says that any scrutiny of the NDNAD is not intended to undermine it, but to make it stronger and more efficient. If someone innocent was to get wrongly convicted through use of the NDNAD, *then*

¹⁴² For Bentham, real rights were legal rights, and it was the role of law makers, and not natural rights advocates, to generate rights and determine their limits (Clapham 2007:11).

its use really would be undermined (McCartney Presentation 2008). It is arguable whether scrutiny of the DB that resulted in the ECtHR ruling has led to the strengthening of the DB however. Faith is important and the public need to support it. The media is partly responsible for the unbalanced understanding of DNA (as has already been identified in chapter 2) and it is essential that for the benefit of society news reporters resist their subjective temptation to sensationalise facts. In order for the database to be most beneficial to society and cases of SV there are several aspects which need addressing and improving for the future.

Unfortunately despite the growing number of individual DNA profiles, success is ultimately determined by crime scene stains and at present there is a lack of crime scene samples to make the necessary impact. Currently DNA is recovered from (just) 10% of scenes with an approximate total of 17%¹⁴³. The number of crimes detected using the DB fell in 2004/05 and hasn't significantly increased in 3 years. In 2006/05 37% of crimes were detected using DNA¹⁴⁴ (McCartney Presentation 2008). Since 2002/03, the number of individuals with DNA profiles on the DB has doubled from 2 million to 4 million, but there has been no corresponding increase in the number of crimes detected (GeneWatch 2008:7). These figures really highlight the importance of obtaining and protecting crime scene stains because numbers are essential if a DB match is ever to be made. 'The database is not efficient right now because there are not an equal number of crime scene stains. Victims would gain more from a more efficient DB; not a global one' (McCartney Presentation 2008).

Another issue raised by McCartney is the costs of operating the NDNAD¹⁴⁵. 'Currently there is no return on the huge investments that have been made by the H.O. SNPs¹⁴⁶ would be a better technique than STRs but the 4.5 million samples we have are not compatible with that and if a global database was ever implemented the worlds' database systems would need to be able to talk to each other' (McCartney Presentation 2008). This is an understandable criticism of the DB and indeed a mass DB would benefit more from SNP genotyping than STRs¹⁴⁷. However, this would be impossible of course if samples are to be deleted after six months.

The linking of offences of rape is not necessarily a straightforward task but advances in DNA techniques ease many difficulties. However, with some exceptions, forces have failed to put in place robust monitoring systems to ensure early identification of a linked

¹⁴³ A majority of crimes do not leave DNA evidence behind, such as 'white-collar' crime.

¹⁴⁴ This statistic is worryingly low, however, I'm sure the percentage of people *negatively* affected from having their DNA on the database is lower

¹⁴⁵ Patents are too expensive (McCartney 2008). 'The granting of patents which assert rights over DNA sequences as research tools should be discouraged by the stringent application of utility' (The ethics of patenting DNA. Nuffield Council for Bioethics 2002 P13)

¹⁴⁶ Single nucleotide polymorphisms, pronounced 'snips.' STR genotyping has many disadvantages to SNP genotyping. If we were to implement a universal DNA database, it would be prudent to make the switch to SNP genotyping. High-throughput SNP genotyping platforms are advanced, and the pace of development (i.e. reduction in costs) is enormous. SNP genotyping is technically simpler than STR genotyping, and it would be easier to miniaturize. Poor quality forensic samples can be more accurately assigned to database profiles when there are hundreds (or thousands) or points of comparison, in contrast to the 10 STRs used in the DB (for a profile consisting of 20 numbers).

¹⁴⁷ 'The SNP technique is unlikely to replace conventional forensic DNA analysis, which identifies individuals using just 13 different, highly variable genetic markers, (instead of 20 markers used for SGM+). The SNP method could prove valuable in samples where DNA from several people is present. SNPs are most commonly used in studies to locate genes associated with susceptibility to disease' (New Scientist 1st September 2008). Surely McCartney would be concerned about the use of SNPs due to the risks posed by storing such highly sensitive material.

series of rapes. More concerning, is the fact that DNA evidence is not always used, even if it is available. This problem was identified in chapter 1 where police are only using trace DNA evidence as a corroborating tool. 'Work is underway within the Intelligence Unit of the Metropolitan Police and in the Northumbria Police Sexual Offences Unit to capture this intelligence more effectively, and to feed it through to operational detectives for action. These approaches are welcome' (HM CPS 2002:38).

One issue for the future relates to the storage and safekeeping of samples in the longer term. Advances in DNA technology over recent years have led to convictions that were not previously possible. These advances continue and the ability to identify suspects is likely to increase in the future. 'It is therefore imperative that all forces implement structures for the demonstrably uncontaminated preservation of samples and exhibits and the effective retrieval of files relating to rape enquiries and other serious crime in anticipation of these advances' (HM CPS 2007:75).

In 2008 the forensic science regulator, Andrew Rennison, ruled that LCN DNA evidence, amounts too small for standard DNA profiling, are safe to use in criminal prosecutions, in spite of recent concern that the technique is flawed¹⁴⁸. Rennison said, 'I am satisfied the science is very safe, however, there is clearly work to be done to develop a coherent standards framework that is transparent, accessible and used across all the facets'. A CPS review concluded that 'LCN DNA analysis provided by the FSS should remain as potentially admissible evidence' (The Guardian 11 April 2008). Professor Brian Caddy carried out an independent review at the University of Strathclyde and also found the technique to be scientifically sound and said it should not cause wrongful convictions' (The Guardian 11 April 2008). However, Caddy made 21 recommendations to standardise procedures. Improvements in the collection of DNA from crime scenes and in its analysis are necessary to avoid the evidence becoming unusable. These include ensuring that police evidence-gathering kits are 'DNA-clean', to avoid contamination with someone else's genetic profile, and that a national agreement on how to interpret the results from LCN DNA should be devised, including clear guidance on how courts should interpret the evidence (The Guardian 11th April 2008).

Conclusion

DNA evidence can prevent innocent people from being wrongly convicted in the first place. 'We now have accurate, reliable and successful testing at our disposal' (Explore DNA 2008). Importantly, no-one has been mistakenly convicted with DNA evidence either. It is also extremely rare for a DNA profile to be flawed and I have argued that the potential for misuse is not a sufficient reason to prevent its use, despite the ECtHR ruling otherwise. DNA profiling may pose risks but these are not yet actualities. There have been a variety of successful cases and technological advances as I have identified throughout this chapter; however there remain several serious areas for improvement which must be employed.

Issues of power are also important considerations in order to prevent an ineffectual system vulnerable to corruption. Arguably the deterrent power of the DB is yet to be observed, however I would argue that it has great potential with the developments and

¹⁴⁸ Mr Justice Weir was the trial judge for the Omagh bombing case in December 2007 where Sean Hoey was acquitted of killing 29 people in 1998; he was not satisfied that Low-template DNA was valid for use as evidence (The Guardian 11th April 2008).

growth of the system. We live in a technological society and everything is advancing in this way, including crime control and prevention.

We have to be careful not to assume that a DNA match showing a person was at the scene of crime means that they were the perpetrator of the crime. DNA works as a complement to other forms of evidence to narrow the pool of possible criminals, therefore it is more of an investigative tool than a conviction tool and the police need to operate with this in mind. 'It is important to remember that DNA is only one part of an investigation and that prosecutions are brought based on other evidence such as witness statements, CCTV footage and other forensic evidence (ACPO Latest News 2009). DNA evidence on its own is not enough to prosecute in a court of law and this safeguard prevents conviction on DNA evidence alone. Furthermore, juries need a more balanced knowledge of DNA so that cases are viewed on 'old fashioned police work' as well as scientific evidence, this would also prevent cases failing and/or appealing. DNA evidence remains compelling and powerful because people want it to work but society's faith in DNA is also important to ensure the safe running and operation of the database. Overall, however, this kind of technology is fortunate, not only as a tool for justice, but for elimination purposes.

The DB can help in rape cases where the offender is known by the victim as well as in stranger/cold cases by proving presence and inducing guilty pleas at the time of interview to help ensure a conviction. The power of the DB to support victims of sexed violence has been ignored and it should be viewed as an opportunity to confront the low conviction rates. The message is slowly becoming clear that perpetrators of this crime will get caught and it is not acceptable. Is the UK criminal justice system ready to stand up to this type of violence and face controversy and attack from HR groups in the process? Moreover, can this stance transfer into the privacy of the home and confront cultural barriers? In the next chapter I will discuss a possible concept of privacy which helps to explain objections to the DB on this basis. This position is of a modern form of privacy which is both homogenous and masculinist.

4) The modern concept of privacy as masculinist

In this chapter I will identify some explanations of privacy and human rights and how fear is an intrinsic aspect within both. Within these explanations will be various analysis of how these concepts are applicable to sexed violence and the operation of the National DNA Database today.

There are several definitions to privacy but I will provide a critique of privacy arguments in relation to surveillance, emphasising the degree to which these concepts are based upon a public/private binary that prioritises a very particular set of values. This concept specifically questions the elusive and ominous privacy argument for having your DNA profile taken and stored. These privacy values may operate within a modern concept of privacy as masculinist, which affects our human rights (HR's) understandings. The implications of such an attitude to privacy and the DNA database could therefore be damaging to the progress of Violence Against Women initiatives.

Privacy

Whilst considering the benefits that the NDNAD could bring to SV and the criminal justice system in general, the aim of this chapter is to problematise objections to this system under the guise of 'privacy'. When the apparent sacrifice of your DNA can provide such a criminal tool, why is privacy considered an overriding issue, and to whom? What is it about databasing that threatens the invasion of privacy and causes such defence? Privacy concerns can originate from fears and as identified in chapter 2, the main reasons for objecting to the DB are based on *fears* of an Orwellian Big Brother *state, capacity* to harm and *perceived* threats, but these are not *actual* problems due to the safeguards in place.

As technological advances propel human interfacing and communication over a variety of formats, more and more detailed information is made about an individual, with the potential risk of that information being made available for anyone to obtain. Information is collected and collated in new and greater ways. Phillipson and Fenwick define privacy as 'the individual's interest in controlling the flow of personal information about herself...the right to 'selective disclosure' (Phillipson & Fenwick 2000:662). Ultimately the disciplinary potential of Foucault's analysis of the Panopticon or Orwell's 'Big Brother,' is only maximised when surveillance is coupled with techniques of behaviour modification, indoctrination and socialisation and these techniques are not combined with the DB.

Surveillance techniques such as CCTV have been embraced by various agencies, not to mention shops, and homes for successful crime reduction¹⁴⁹. 'The public accepts CCTV as a means of protection' (H.O 2005:7). Apart from the deterrence functions of CCTV, it has

¹⁴⁹ In the early 1990s CCTV initiatives showed clear reductions in crime. Kings Lynn and Airdrie Town had experienced a 97 and 95% reduction in car crime, and in Newcastle hundreds of arrests were attributed to CCTV' (Norris & Armstrong 1999:64) In 1996 figures cited by the Home Secretary and Audit Commission showed that total crime had been reduced by 21% and detection rates had increased by one-sixth (Short and Ditton cited in Norris & Armstrong 1999:64). Furthermore there was no evidence of displacement however Doncaster did show signs of increased crime in outlying townships where there was no CCTV (Norris & Armstrong 1999:65). There would not be a displacement issue with DNA databasing. There was a 19% fall in crime in Newcastle and a 10% fall in Brighton (Norris & Armstrong 1999:64)

the capacity to direct and employ appropriate responses for the detection and identification of offenders¹⁵⁰. ‘CCTV can be a very useful tool in investigating terrorism, murder and rape as evidence of the suspects or their vehicles can be revealed. It helps to manage the problem of informational uncertainty and for allocating resources to incidents (Norris & Armstrong 1999:206). Therefore, ‘objections to CCTV seem either callous or too concerned with the rights of criminals’ (Norris & Armstrong 1999:37). Even Liberty was not opposed to mass surveillance in 1994 but argued for statutory regulation of the CCTV industry. (Norris & Armstrong 1999:38)

It is perhaps because privacy is prevalent as a new-found concern within our society that the western legal system has failed to represent it sufficiently. Current data protection law was not designed to cover the prevention and detection of crime and it was never drafted to deal with the prospect of mass, automated surveillance so it has limited applicability.

‘The concept of ‘privacy’ has become too vague and unwieldy a concept to perform useful analytical (and, hence, legal) work. It has grown into as nebulous a notion as ‘freedom’ (with which it is not infrequently equated) or ‘autonomy’ (with which it is often confused). This ambiguity has, it is submitted, actually undermined the importance of the value of ‘privacy’ and impeded its effective legal protection’ (Wacks 1994:10-11).

Ultimately the modern state would be inconceivable without being able to provide routine administrative functions of welfare, health education and security for its population via electronic records. Surveillance is also an elementary building block of all human societies since the act of socialisation would be unthinkable without the surveillance of adults. So whilst the dominant cultural theme of surveillance is tragic, there is also an ambivalence which recognises that ‘surveillance has two faces’ (Lyon 1994 cited by Norris & Armstrong 1999:5). It is seen not only as both protective and enabling but also as deeply implicated in the structure of totalitarian rule. ‘Few of the connotations of surveillance are positive. And yet, in contemporary Western society we have largely embraced surveillance; while we worry about the limits of privacy and about things getting into ‘the wrong hands’, in general a burgeoning of electronic surveillance is accepted as a means of making our world safer’ (McGrath 2004:1).

Nock asks, ‘how in an anonymous society of strangers is trust to be produced?’ He argues that this is one of the central problems of late modernity. ‘Ironically then, while we normally see surveillance as a diminution of privacy, it is actually a consequence of that very privacy. How else can we prove that we can be trusted, if not through our reputation?’ (Nock 1993 cited by Norris & Armstrong 1999:22). However the DNA database does not survey the population. It is an intelligence tool for identification and elimination purposes, solely for crime detection and conviction.

In order to understand the controversy regarding the technological advances of DNA databasing and detection, further definitions of privacy are necessary to consider. Privacy is also about maintaining the privacy of one’s body by preventing any personal invasion of the body (internal) and as a legal defence for protection (external)¹⁵¹. Initially the duality of

¹⁵⁰ In 1995 the H.O said that ‘they do not replace police officers but boost their effectiveness’ (Norris & Armstrong 1999:65).

¹⁵¹ Extraction of DNA can be seen as an offence to bodily integrity – invasion of technology.

privacy is problematic because it blurs our understanding of the concept. For example, in terms of the database, privacy as an argument is used both to defend and offend a person. However, this duality is also representative of a modern definition of privacy. Today, privacy issues are a constant consideration and cover a massive range of areas. One could consider this problematic or beneficial. It is not simple in its terms and can be applied to almost any situation. 'Privacy could be regarded as 'everything; an individual's home, family, religion, health, sexuality, personal legal and personal financial affairs' (HMSO 1990:P3.5).

Whilst we want to protect our privacy, we want to be protected, and this sometimes means the sacrifice of certain 'privacies'. 'Surveillance has proliferated not least because we desire it – we enjoy it, play with it, use it for comfort' (McGrath 2004:vii). However privacy is also on a correlation with having your human rights respected.

Human Rights

The human rights approach (including civil and natural rights) starts from a presumption that we all have rights to life, liberty, free speech, education, political freedom, property, family life, and fair trial if accused of a criminal offence. Further to this 'the foundation of human rights can be traced to the twin ideas that human beings are born equal in dignity and rights, and that all human beings have to be treated with equal concern and respect' (Clapham 2007:143). Unless of course, one behaves illegally, and cannot be viewed equally. An individual is not entitled to liberty, therefore, if a fair procedure demonstrates the necessity of incarceration. 'Few contest the need for certain convicted criminals to be deprived of their liberty' (Clapham 2007:97).

Privacy is a central component of general human rights and is about balancing the right to privacy against other interests, particularly the public interest in freedom of expression. Contrary to popular belief there is not always a conflict between privacy and freedom of expression. '...the perception of inevitable conflict between free speech and privacy is exaggerated and simplistic...an examination of the values underlying each reveals them to be in many respects mutually supportive, rather than invariably antagonistic.' (Phillipson & Fenwick, *ibid.*, at 662.) Significantly, the right to freedom of expression is an individual human right which is protected under the Human Rights Act (HRA) 1998:

Freedom of Expression under Article 10

- 1) Everyone has the right to freedom of expression. This right shall include freedom to hold opinions and to receive and impart information and ideas without interference by public authority and regardless of frontiers.
- 2) The exercise of these freedoms, since it carries with it duties and responsibilities, may be subject to such formalities, conditions, restrictions or penalties as are prescribed by law and are necessary in a democratic society in the interests of national security, territorial integrity or public safety, for the prevention of disorder or crime, for the protection of health or morals, for the protection of the reputation and rights of others, for preventing the disclosure of information received in confidence or for maintaining the authority and impartiality of the judiciary.

As a society we have developed our human rights understanding from various philosophers. John Locke believed in natural rights¹⁵² and tacit consent, whereby you agree to

¹⁵² John Locke's *Second Treatise of Government*, 1960, considered men in a state of nature where they enjoyed a state of liberty, yet it was not a state of licence (natural rights). Locke reasoned that everyone 'is bound to preserve himself' so when his own preservation is not threatened everyone should 'as much as he can...preserve the rest of mankind'. For Locke, 'every man has a right to punish the offender and be

live by the rules of the state that you occupy. In his *Epistola de tolerantia* of 1689, he calls 'tolerance' the starting point of every reasonable morality. Perhaps there is a level of tolerance required for the operation of the database. Natural rights are the rights of the individual, considered beyond the authority of any government or international body to dismiss, such as the right to life. Defining an agreed concept of human rights is problematic because the values underpinning these declarations vary according to the group or state's definition. One of the significant aspects of the concept of HR's for criminology is associated with the definition of crime; if basic privileges provide the means by which individuals can fully participate within human society, then their deprivation could be regarded as criminal. Therefore the institutions within any socio-legal system that lead to violations of these rights, resulting in racism, sexism or poverty for example, may be regarded as criminal.

It has not been long since HRs were officially implemented¹⁵³. Various bodies and lists of rights exist, such as the United Nations Declaration of Human Rights and the European Convention on Human Rights and Fundamental Freedoms. The provisions contained in Article 8 of this convention are pivotal to human existence free from personal and private interference. Art.8 is used frequently by human rights groups to buttress their claims against various infringements, as seen by the ECtHR ruling discussed later. The right to equality before the law and protection against discrimination has been central to conceptions of basic human rights that underpin the formation of the United Nations and the European Union. Protection against discrimination is recognised in Article 7 of the Universal Declaration of Human Rights, and in Article 14 of the European Convention on Human Rights. Many Human Rights organisations are against the apparent inequality of the database; for example the higher proportion of men and ethnic minorities stored on it. However this is reflective of the people taken into custody and could be solved by implementing a mass database¹⁵⁴.

Stan Cohen coined the term 'moral panic' in 1972 and concentrated mainly on media reaction to events in the news. However the sensationalism of events is closely linked to the embellished and overstated nature of science fiction claims and attacks on the DNA database. As identified in chapter 2, the HR group GeneWatch appear to work by creating moral panics through the sensationalising of new technological advances.

The social context of moral panics was developed by Stuart Hall in 1978. Moral panics have been seen as inevitable and periodic occurrences for societies undergoing a reaffirmation or re-definition of moral boundaries, however they can often make situations worse by creating a spiral of reaction, fear, and un-rest. Some HR groups operate on a high moral ground, making claims about what is wrong and what is right. HR's can enjoy the privilege of overriding other HR's depending on societal influence, culture, Government

executioner of the law of nature'. Civil government enforced the law of nature and stopped men from acting as their own judge. He considered that this social contract, freely entered into, entitled the government to enforce laws for as long as the government respected the trust placed in it (tacit consent). Further to this, 'men may be restrained from invading other rights and from doing hurt to one another'. (Clapham 2007:7). I would argue that DNA collection is not 'a hurt'. And any invasion on your rights is justifiable in order to preserve the rest of mankind.

¹⁵³ Universal in 1940. France & the US were first to employ HR's in 1970's. The UK may be trailing in this respect it's leniency might be measured by the size of the DB

¹⁵⁴ This is debatable however as a global DB does not consult social inclusion and a mass DB could mask the issue.

etc.¹⁵⁵ In chapter one I discussed the poor prosecution rate for rape and this could indicate that the human rights of men are privileged over women's rights.

Although HR's appear to be concerned about the greater good, their actions can be detrimental in some cases, through the operation of fear and numerous requests by human rights that the DB not expand. Their angelic appearance is deceiving because in reality their claims often work by creating a moral panic. The process of a moral panic produces an increase in social control responses, such as *escalation*, in which there are calls for 'strong measures' to counter the threat. It could be argued that the ECtHR ruling was in escalation to concern over 'innocents' being stored on the database – hence why permanent retention of profile data has now been deemed invasive to privacy despite it's relatively insensitive, numerical format.

Another aspect to attitudes towards Human Rights and privacy is 'political correctness'. The term PC is used to describe language, ideas, policies, or behaviour seen as seeking to minimise offense to gender, racial, cultural, disabled, age or other identity groups. Critics argue that political correctness is censorship and endangers free speech by limiting what is considered acceptable public discourse, especially in university and the political forums. People ascribing to PC attitudes would probably advocate human rights, even if some of those human rights hinder scientific research or crime control measures.

Some conservative critics of political correctness argue that it is 'a form of coercion rooted in the assumption that in a political context, power refers to the dominion of some men over others, or the human control of human life; by this argument, ultimately, it means force or compulsion' (Bailyn 1992:55). This argument holds that correctness in this context is subjective, and corresponds to the sponsored view of the government, minority, or special interest group that these conservative critics oppose. They claim that 'by silencing contradiction, their opponents entrench their views as orthodox, and eventually cause it to be accepted as true, as freedom of thought requires the ability to choose between more than one viewpoint' (Strauss 1952:23).

Thomas Nagel asks in his book *Mortal Questions*, 'why only look at rights when there are so many other considerations?' Human rights are not paramount. Although they are ubiquitous in modern British society, they do not always have to be the most important consideration. By focussing too much on them as an issue, it almost sanctions and authenticates their relentless pursuit, which merely perpetuates HR concerns; such issues take away from the central question, and in this dissertation, that is the crisis of sexed violence and how the database might address it.

Database privacy concerns

A prior concern among civil liberty groups is the sampling procedure itself. The media have documented various controversies surrounding the incidence and procedure of sampling (shown in chapters 2 and 3). Under Section 65 of the Police and Criminal Evidence Act (PACE) 1984, the definition of 'intimate' was 'a swab taken from any part of a person's body other than body orifices'. The Criminal Justice and Public Order Act (CJPA) 1994, amended S.63 PACE, to include saliva swabs and hair plucked from the head as a non-intimate sample.

¹⁵⁵ There are some philosophical contentions about civil liberty values and how they are lesser (if at all) than the importance of a conviction.

[Which also include, footprints, skin swabs and nail clippings.] This sample can be obtained from an arrestee, once in custody and if necessary without their consent.

A buccal swab in the mouth orifice is a scraping of tissue from the inside of a person's cheek and for GeneWatch and other HR groups this type of sample is considered invasive in today's society. Before this category was widened, intimate samples could only be obtained with written consent from the arrested person by a medical practitioner, however a jury could draw inferences from a refusal to give a sample. Parliament made this change so as to facilitate collection of DNA evidence without consent. The definition of intimate has changed over the course of 10 years and this could reflect societies changing attitude, and acceptance, of intimacy. Liberty groups would argue that the Government has invaded our private space in an unacceptable and intrusive manner; however I have argued that this intrusion is justified against the gains. Consent is a primary concern involved with privacy risk.

These risks have been amplified by the fact that there is no general right to privacy in English law other than a right to informational autonomy.¹⁵⁶ Within the legal system there are several indirect methods of protecting privacy and human rights. These are:

- A) Defamation – slander etc.
- B) Trespass – infringe, intrude etc.
- C) Protection From Harassment Act 1997

Judge Sedley LJ has commented that:

‘concept of privacy does...accord recognition to the fact that the law has to protect not only those people whose trust has been abused but those who simply find themselves subjected to an unwanted intrusion into their personal lives. The law no longer needs to construct an artificial relationship of confidentiality between the intruder and victims: it can recognise privacy itself as a legal principle drawn from the fundamental value of personal autonomy’ (Douglas v Hello! 2003).

The Action for Breach of Confidence can be used in cases regarding DNA. The Law Commission explains the action for breach of confidence as,

‘a civil remedy affording protection against the disclosure or use of information which is not publicly known and which has been entrusted to a person in circumstances imposing an obligation not to disclose or use that information without the authority of the person who imparted it’ (HMSO 1981:10).

In regards to the DNA database, a specific law in the UK criminal justice system to prevent your DNA from being collected or stored has not yet been implemented, although changes to the law are due in 2010 as a result of the ECtHR ruling. It is still maintained by the Government that DNA collection is justified for criminal justice and any invasion to ones privacy has been partially accepted for the purpose of crime control.

The Right to Privacy and Family Life under Article 8 is guaranteed under our domestic law (ECtHR). It is applicable to DNA and privacy cases:

- 1) Everyone has the right to respect for his private and family life, his home and his correspondence.
- 2) There shall be no interference by a public authority with the exercise of this right except such as is in accordance with the law and is necessary in a democratic society in the

¹⁵⁶ The ‘residual approach’ in legal practice is where loop holes exist after laws are implemented; the residue can be used for many privacy cases.

interests of national security, public safety or the economic well-being of the country, for the prevention of disorder or crime, for the protection of health or morals or for the protection of the rights and freedoms of others.

To summarise, there is unlikely to be a breach of Article 8 if the interference with the applicant's private life is, for example, in the interests of national security and there are adequate controls in place. However the discourses embedded in this Article are concerning; the emphasis on *his* private and family life, and the masculine nature of the value placed on respecting one's privacy is covertly protecting sexed violence occurring in the home¹⁵⁷. Ultimately concerns about the database also originate from the fear that there are no privacy laws in place to prevent its misuse. However, as identified in chapter 2, there are very specific procedures maintained by the Government and the FSS to prevent misuse.

S. And Marper v The United Kingdom

Michael Marper is a British man objecting to the retention of his DNA information on the DB. The decision to retain his sample on the DB was initially upheld by the High Court in 2003. In that Judgement, Judge Lord Justice Sedley considered 'a universal DNA database'. At paragraph 87 Sedley wrote:

'I would certainly not assume that a comprehensive national DNA database or samples bank, if one were to be lawfully compiled, would constitute an unacceptable invasion of privacy. It would be for Parliament to decide whether the intrusion and surveillance involved in assembling and maintaining such a resource is an acceptable price to pay for its advantages. Certainly the information available to this court suggests that, subject to these considerations, a universal DNA register would be a real and worthwhile gain in the endeavour to ensure that the guilty, and only the guilty, are convicted of crimes. In other words, whether it is the unconvicted population as a whole whose bodily samples are kept or only that section of it which has faced charges, the justification is the same' (The Register 10 September 2007).

Although domestic courts had found in favour of the Government's position, Marper appealed on the grounds that police contravened the Human Rights Act 1988 and the European Court of Human Rights ruled on the case in December 2008, making the permanent retention of DNA data illegal. The judgment recognises the need for an approach which discriminates between different categories of offending and defined periods of storage and so the Home Office published the public consultation paper '*Keeping the Right People on the Database*' in May 2009. The main proposals are:

- **Samples**¹⁵⁸ – the destruction of all samples, whether convicted or not. Retention for a maximum period of up to 6 months solely for the purpose of confirming suitability of the sample for DNA profiling purposes.
- **Profiles** – retention of all profiles for those convicted and automatic deletion after 6 years of profiles for persons arrested but not convicted of a recordable offence.
- **Violent and sex offences and terrorism**¹⁵⁹ – indefinite retention of all profiles

¹⁵⁷ I recognise that this is the terminology that has always been used for writing statutes however I argue that it contributes to the masculine hegemony inherent within our legal system.

¹⁵⁸ The Government will be looking at the destruction of around 4.5 million samples, within the next 2 years – this is going further than the ECtHR judgement, due to the deep concern some people have about 'living samples' being retained by the state.

¹⁵⁹ Evidence shows that there is a span of 4-15 years within which retention periods could be justified. The Jill Dando institute work suggests that 52% of subsequent offending takes place within the first 6 years of initial conviction, and two thirds within 12 years. Therefore the Scottish model is not sufficient.

for those convicted and automatic deletion after 12 years of profiles for persons arrested but not convicted or acquitted.

- **Young people**¹⁶⁰ – those under 18 years old whether or not convicted of an offence (unless it is a violent or sex offence), will have their profiles deleted on reaching 18 years old, provided they have been subject to only a single event of arrest or conviction prior to reaching that age

(H.O Press Briefing 2009)

My initial response to this approach is that it does discriminate between categories of offending and highlights the seriousness of sexed violence. Furthermore, the set time limits on retention would limit the potential for future governments to misuse the data to restrict people's rights and freedoms. GeneWatch, however, think the UK Government has continued to misinterpret the ruling and thinks these retention times are far too long, both for innocent people and for people with convictions or cautions for minor offences (GeneWatch Web 2009). Conversely I argue that these proposals have detrimental implications to the effective functioning of the DB that are potentially massive. Human rights have sought destruction of the database and won.

As highlighted throughout chapter 3, retention of DNA data is essential for case success; Operation Phoenix and Vagabond were successful thanks to the retention of DNA profiles from minor crimes; Operation Advance and Recall were achievable thanks to the preservation of samples for future improvements in profiling; Kiszko, Wright and Campbell would not have occurred had data been deleted after six (or twelve) years.

The family of Sally Ann Bowman is against the recent ruling, whose killer was convicted as a result of DNA taken after he was arrested following a pub brawl and subsequently acquitted. In May 2002, Kensley Larrier was arrested for the possession of an offensive weapon. His DNA was taken and loaded to the DNA database, although the proceedings were then discontinued. Two years later, DNA from a rape investigation was speculatively searched against the database and matched his sample. Larrier received a 5 year custodial sentence and was entered on the sex offenders register for life. Convictions have occurred for serious crimes of culprits who had had their DNA taken and retained for a previous crime where they were arrested, but not convicted (Smith, J. H.O. 2008). These opportunities in the future will be missed under the proposals to reduce retention periods.

The main and most important proposal is the deletion of samples – this is a huge 'win' for critics because samples have the potential to contain sensitive data – yet this is a loss for the CJS because it affects the ability to develop DNA testing and pre-date crimes and needs to be longer than six months. Yet the ruling went further than the deletion of samples and 'the European court was at pains to say that retention of numerical profiles (even without the bodily samples) engages the right to respect for private life'¹⁶¹ (Fairclough, A. 7th May 2009). This is not proportionate and has gone too far in its attempt to secure human rights.

The 6 and 12 year retention periods are proportionate and safeguard the rights of the individual and acknowledge the concerns of the public on this important issue.

¹⁶⁰ The DNA of all children under 10 – the age of criminal responsibility – held on the database has already been removed.

¹⁶¹ Judgement: The DNA profiles' capacity to provide a means of identifying genetic relationships is in itself sufficient to conclude that their retention interferes with the right to the private life of the individuals concerned. CASE OF S. AND MARPER v. THE UNITED KINGDOM *Online* – Available at: <http://cmiskp.echr.coe.int/tkp197/view.asp?item=1&portal=hbkm&action=html&highlight=Marper&sessionid=30588350&skin=hudoc-en>. [Accessed 24 September 2009]

Refer to Jeffrey's comment in chapter 2 - 'there is no concern to be raised over police access to boring STR's'¹⁶². (Jeffrey's presentation 2007) – So why has the ECtHR responded in this way? I maintain that all profiles should be stored indefinitely.

Had the DB been in the public domain earlier, errors may have been prevented, and fears would not have escalated within the media and human rights groups to allow for this disappointing ruling. I believe this decision could permanently taint our understanding of privacy and affect the CJS.

The proposals have been controversial in the media because the Home Office is not destroying the samples of those persons acquitted for their crime, and thus failing to implement the judgement fully – although these proposals are not yet enshrined in law. 'The Home Office is trying to justify intrusion into privacy rights with inconclusive and misleading 'research.'¹⁶³ The new proposals maintain a major distinction between the 'genuinely innocent', such as volunteers, whose profiles will not be uploaded at all, and those forced to give their DNA on arrest, whose profiles will be retained for at least six years, or 12 if they are accused [but not convicted] of a serious sexual, violent or terrorist offence (Fairclough, A. 7 May 2009).

The constant reference to 'innocents' remaining on the database is in contrast to the previous understanding that having your DNA data on the DB never meant criminality per se – it was merely a criminological tool for exoneration and identification purposes. 'The ECtHR said it was very concerned about stigmatisation that comes from being on the database. But you are not going to feel less stigmatised by the difference between six and twelve years' (Sturcke, J. 7th May 2009). I further question the reliability of the research to support these retention periods. I am concerned that recidivism will occur amongst criminals once they know their data has been deleted, especially in cases of sexed violence¹⁶⁴.

Although it is necessary to consider the dangers in order to prevent them, anxious claims create moral panics. Professor Alec Jeffreys has presumed the illegal use of DNA data by some authorities, 'today unscrupulous investigators can easily get your DNA profile from saliva on a coffee cup or cigarette butt and then use it to show whether you are the real parent of your child. It's illegal but simple to do, and I am very sure it occurs quite often. It is a gross invasion of a person's privacy'¹⁶⁵, (The Observer 8 August 2004). The illegal use of the DB to locate paternal relationships is damaging to the DB. Furthermore, it is unfortunate that the DB can be viewed as a serious risk to the discovery of absentee,

¹⁶² Short Tandem Repeat – current method of extracting a DNA profile – which can also identify kinships.

¹⁶³ I am frankly astonished to find, at Annex C to the consultation paper, a rather embarrassed-sounding Ken Pease of the Jill Dando Institute attempting to justify these new retention periods on the basis of a minuscule sample of some 500 people taken from the Metropolitan Police Area over three separate days (one of which he says might be a bank holiday and therefore a bit skewed). Apparently, we can deduce from this sample that those arrested but not convicted are actually slightly more likely to commit crime in the future than those who are convicted but given a non-custodial sentence. (Fairclough, A. 7th May 2009)

¹⁶⁴ I believe the reason the Home Office has proposed these retention periods for arrested but not convicted persons is due to flaws within the CJS. If you're arrested but not charged there must have been an error or injustice in the police/court process so it is better to take the data and avoid criminals escaping the net.

¹⁶⁵ 'What is more, police can now covertly take DNA samples, for example from the used coffee cup of a suspect'. (Daily Mail January 21 2006)

surreptitious fathers, despite the criminological gains. The discourses operating here are an example of preserving male interests, where the protection of paternal relationships is more concerning than exposing criminals. This contributes to the current state of crisis we face today regarding sexed violence.

A discourse exists where our current attitude to privacy contributes to women's subjugation and the issue of sexed violence being ignored within the CJS. This discourse has always been in circulation and it is important to unveil the guise of privacy contributing to the ignorance of SV. The domestic sphere is an issue and privacy of the domestic life is also a problem. Our claim to privacy can endure the act of SV in the home and so long as the domestic sphere is viewed as private, abuses of this kind will continue to occur un-reported. Unfortunately private attitudes to the domestic sphere transfer into cases of SV occurring outside the home. Any sex act is deemed highly private, even an offence of rape and this contributes to women being unable to take rape charges through to the prosecution level. Challenging our paranoia about the retention of our internal and external privacy could help because it is currently working against a large majority. I will now look at the history of our CJS in relation to the domestic sphere and patriarchy before I look at masculinity theory.

History & masculinity theory

Historically there has always been a poor representation and legal standing of women which remains today. Our understanding of privacy can be drawn from years of hegemonic and patriarchal discourse. By looking at the historical background of women and the legal system in and around the eighteenth century, we can see how patriarchal and hegemonic attitudes have survived.

The development of the patriarchal state and the enforcement of gendered ideologies placed women as servants. Regulation occurred through the patriarchal family. Police acted on political imperatives and influenced ideas and discourses about sex and race. The CJS is set up to police the public, not private, arena and this is why police today remain reluctant to police the domestic space. 'Police involvement only occurred in cases of serious or public violence; they intervened only if noise or bodies were polluting the good order of the public street' (D'Cruze 1998:69). Men were rarely sentenced for 'domestic' crimes. The Lord Advocate of Scotland gives an excuse as:

'Sentences of imprisonment could well have an adverse effect upon a family by removing the 'breadwinner', and imposing heavy fines will likewise reduce the 'purchasing power' of the family and place the burden of subsidising such families on the taxpayer' (Select Committee 1975 cited in Dobash & Dobash 1992:208)

This communicates a sanctioning of private violence against women. In court women survivors are silenced and endure the questioning of the respectability of their family and a trial of their personal character. The importance placed on chastity stemmed from patriarchy and meant that women behaved as the exclusive property of one man rather than common property to all men. There once was a common law principle that married women had no separate legal identity, therefore, if a woman was unmarried, she was under the control of her father and/or her husband to be. Further to this, if a woman had a 'bad character', her consent could be assumed, or become irrelevant to any violence, even gang rape (Clark 1983:19). Furthermore husbands had the legal right to use 'moderate correction' to chastise their wives physically for misbehaviour: it was suggested that if a stick was used it should not be thicker than a man's thumb (Shoemaker 1998:104).

Patriarchy and chastity were used as forms of control from an early time and the Police enforced these conventions through their police work (D’Cruze 1998:18) As stated by Farrell, ‘part of the police’s function is to defend the institution of the family, which often means sacrificing the well-being of the women and children’. In modern capitalist society it is our patriarchal system that places more importance on the nuclear family remaining united, than the importance of women’s rights in a home. Therefore women are further controlled and policed by the roles they are expected to perform as the primary carer. ‘The nuclear family reproduces nurtures and controls the future labour force’ (Farrell 1992:15).

The current Conservative Party policy views strong families as essential for the maintenance of social order. ‘Acknowledging violence and abuse within the family has the potential to open up the private world of the family to external scrutiny, and therefore to challenge the image of the ideal strong family’ (Saraga 2001:195). The idea that a married woman can be raped by her husband is still relatively new. Some power has been restored to women world-wide by making this illegal in 1995, however with racial divides¹⁶⁶ and privacy issues concealing sexed violence in the home, the power is still maintained and controlled by our patriarchal system.

Masculinity is a point of view, which assumes or takes for granted our privileges, usually implicitly or explicitly in the interests of men. Crime and victimisation is about the articulation of the ways in which ‘power is manifest in individual interactions, especially amongst those who have the benefits of structured privileges because they are men in a gender stratified society’ (Newburn & Stanko in Jewkes & Letherby 2002:266).

Connell developed the term ‘hegemonic masculinity’ in 1987; it is a ‘version of masculinity which pervades all aspects of public and private life providing a normative model against which all behaviours are judged’ (Connell cited by Walkate 1995:97). However, it is this ‘normative’ cultural script that provides the excuse for men’s sexed and racialised violence, by removing *their* agency for *their* criminal act. Walkate finds that ‘the male defendant, in rape trials especially, is also denied a sense of agency for his own actions; he succumbs to his natural sexual urges’ (Walkate 1995:143). Thus the biased attitude of the law towards its subjects is reflected and supported within the emergence of masculinity theory.

Masculinity theory could be ‘associated with the legitimisation of men’s access to violence as a personal and political resource’ (Walkate 1995:98). Walkate says that ‘the perpetration of sexual violence is just one way in which the expression of ‘doing gender’ by men is accomplished in relation to women’ (Walkate 1995:98). Walkate says that ‘the state is a mode of masculine expression’ (Walkate 1995:182).

Hegemonic masculinity is the set of ideas, values and representations and practices associated with ‘being male’ which is commonly accepted as the dominant position in gender relations in a society. ‘It is the culturally dominant form of masculinity where

¹⁶⁶ ‘Police officers generally come to regard domestic assault as a ‘normal’ occurrence in run-down inner-city neighbourhoods, where victims because of their powerlessness may be seen to forfeit their right to protection. For example, domestic violence assault committed against Asian women by Asian men is often seen as a ‘family matter.’ (Edwards 1989:211) Furthermore domestic violence was under-policed because it was claimed that police intervention would cause conflict with the community leaders because of the importance of the patriarchal structure in Asian communities. (Muncie & McLaughlin 2001:223) However, one has to challenge the importance of patriarchal structures in every religious community and in every Government body.

hierarchies of dominance and subordination among men and between men and women come to be commonly accepted' (Jefferson 2001:138). This is further expressed through the power relations of patriarchy: that is, 'the maintenance of male power and control over women and children' (Radford 2001:232). Feminist campaigning has informed criminology and jurisprudence through its analysis of law as a patriarchal institution reflecting and reproducing male dominance.

Who creates these laws then and is it a conscious conspiracy? Thornton seems to blame men for the gender order in which we live, 'how are men going to release the shackles imprisoning their minds so that women are viewed in other than one of a number of stultifying stereotypes? After all, the cultural construction of gender is a product of the male mind' (Thornton 1989:121). Hollway seems to agree with Thornton that there is 'collaboration with men in the oppression of women' and that 'as the mouthpieces for legal, psychiatric and journalistic discourses, men collaborated in reproducing a view of the world which masks men's violence against women' (Hollway 1981:102). However she then goes on to contradict herself by saying that this subordination is unintentional, 'the discourses...have the effect of distorting systematically (though, not intentionally) the understanding of men's masculinity and its expression through their sexuality' (Hollway 1981:102). Therefore, these discourses and cultural scripts have so much power because *it is just the way we think*. The problem lies in the hegemony and the discourse, not necessarily in 'man himself'. 'The power of the discourse resides in its hegemony, in the way it passes as truth, and in the way its premises and logic are taken for granted' (Hollway 1981:102).

These approaches are common and only through counter hegemonic theory and analysis can they be deconstructed. Hegemony is powerful because it is achieved by consent and further to this; there is no neutral objective because you do not have to be a man to have masculinist perspectives. According to Gramsci (1987), hegemonic masculinity is a 'social ascendancy achieved in a play of social force that extends beyond contests of brute power into the organization of private life and cultural processes' (Thornton 1989:119). Women and men live by cultural roles that are inscribed by a hegemonic society; it is a 'learned formula.' As Foucault quotes 'the code they come to define is not that of law but that of normalisation' (Foucault 1976:70). These discourses unwittingly serve to legitimate men's violence by diverting attention from personal responsibility and agency, to pathological reasons beyond their control.

A modern form of privacy as masculinist

The CJS cannot satisfactorily police male violence against women when the maleness of crime is accepted and women are seen as obedient. Today, juries still ascribe to the cultural scripts used by men. Bandalli finds that, 'it is contrary to our culture to enforce responsibility in family relationships on men. Women bear that responsibility' (Bandalli 1995:74). Moreover, women and children are vulnerable to isolation and its consequences within the private sphere of the home. 'The privacy afforded this sphere is a contributing factor in the oppression which women experience' (Burke 2001:168). Gordon challenges the idea that state intervention is always an intrusion into family privacy and a violation of civil liberties, asking 'whose privacy?' and 'whose liberties?' are being violated. Outrage over state intervention, she suggests, 'was frequently an outrage over a territorial violation, a challenge to male authority' (Gordon 1989:296).

Nowadays women have more equal rights to men and in many spheres of life, men and women are viewed the same. It could be argued that changes within familial roles

has initiated panic over the maintenance of control within patriarchal institutions and also over the collection and databasing of DNA. Because maintenance of the family unit is considered important in society, intrusion of the familial home may be seen as potentially damaging to patriarchal values and the family unit itself. Criminal acts of abuse occur in the home under the guise of privacy. Therefore the value placed on privacy protects and preserves such violence.

Privacy values are also used as an objection to the taking and retention of DNA, even if this is justified for crime control purposes. The reluctance to accept the NDNAD could be related to a modern concept of privacy which is masculinist; protecting male interests because criminal behaviour remains a male dominated act, especially sexed crime.

This (extreme) form of privacy is modern because it has recently evolved as a response to technical advances in forensics, the Human Rights Act 2001 and the Criminal Justice and Police Act 2001. It has been employed by so called civil liberty and human rights discourse and it inadvertently operates to hinder women's justice and necessary beneficial crime control methods. It seems that any opposition to the collection and storage of DNA is partly reflective of a prior male concern that privacy, self, home, castle and kingdom is being invaded and punishment will be the consequence. The definition of secret, private, personal information is partly determined by sexual and/or bodily aspects which are masculine in essence. Privacy is gendered due to sexed connotations¹⁶⁷. In addition, the property masculinist view of 'mine and what belongs to me' is similar to that of privacy with its connotations of ownership and protection¹⁶⁸. Even numerical DNA profiles are now deemed capable of tangible ownership, as personal and private information, even though the data means nothing without context. This is not a proportionate or common sense response to privacy concerns around the DB.

This concept of privacy as modern and masculinist could be preventing necessary development of the DB – a system that could operate to aid detection and conviction in cases of sexed violence. It could be argued that our elusive defence for privacy is because we are (subconsciously) ascribing to the concept of a masculine and modern understanding of privacy. The concept of 'privacy' is a masculinist knowledge that passes as truth and because the law produces this truth it is powerful. The language of this discourse has serious repercussions and impact because it works to marginalise and 'other' people. Is society trying to protect a version of privacy which is masculinist?

Presently, the police are utilising the DNA database to achieve success in various projects and operations. Therefore this tool circuitously confronts SV and patriarchy by forcing these cultural discourses out into the open.

¹⁶⁷ Kant's *The Doctrine of Right* spans the relationship between Kant's moral and political philosophy, dealing with the issue of rights and ownership, the status of the woman in relation to the man in marriage rights, use of the body and ownership of the body. Ancient Greeks thought the concept of privacy was an inferior realm and originates from the word 'deprivation' which is derogatory – similarly women were considered private. The popular were public.

¹⁶⁸ Other masculinist themes are dualist and affective. The duality of the DB refers to the internal or external concerns of privacy and challenges to the DB are affective. The challenges made by HR groups are similarly masculinist.

Confronting privacy as masculinist

I have postulated a theory of privacy as masculinist and how this could be problematic to the DB in today's society. If we understood the masculinist history that informs our conception of privacy, we would better understand objections to the DB based on this conception. Consulting and adjusting the reasons for privacy concerns may allow a more open and rational response to DB developments. Recognising how privacy claims are sexed through hegemony should allow for a more fair critique of the DB. Introducing systems which submit control and remove the guise of so many excuses can only be valuable to SV and crime as a whole. I have argued that the essence of privacy as masculinist could have contributed to the strict regulations proposed by GeneWatch (in chapter 2) and the ECtHR ruling. Allowing the permanent retention of DNA profiles from citizens, whether they have been charged or not may challenge this attitude to privacy and allow reasonable control within an area of crime that is currently in a state of crisis.

The idea that the state has access to our personal information provokes scepticism around state surveillance and control. Thus, fear and anxiety encourages a need to protect what is private and 'ours'. The concept of 'Big Brother' originated from George Orwell's 1984. The irony of this is that violent crime has proliferated despite emergence of a perceived Big Brother state, insinuating that control and surveillance is not excessive, but needs to be. In the film 'Enemy of the State' the underlying theme asks 'what gives you the right to come into my home?' The contempt about any Government body invading your privacy by coming into your home is concerning because it has prevented abuses in the home from being noticed and punished. This can be extended to the expressed concern about DNA collection and 'coming into my body' – effectively, to identify or exonerate the perpetrator of a crime. The Government has that right to protect you and part of your civil obligation¹⁶⁹ is to respect that. Crucially however, these concerns take us further and further away from the real problem of violence, especially sexed violence, and how it needs to be stopped.

Being autonomous is about being able to govern yourself and having a certain degree of independence and anonymity. It is an important aspect for many individuals. The value we place on autonomy is directly linked to the value we place on our privacy. Agency, however, is more about your personal responsibility and as an agent you are the cause and means for any action. Agents have the power to act and make choices and one has to think about how we act in society to get along with others. This consideration of others is the essence of society thus agency is critical to the well being and functioning of society; not anonymity. The NDNAD encourages agency.

There is also a Utilitarian perspective which should be employed with regard to the database. Utilitarianism is in sharp contrast to HR theory and shows that we must not simply take HRs as the voice of ethics. Utilitarianism is the idea that the moral worth of an action is solely determined by its contribution to overall utility, that is, its contribution to happiness or pleasure as summed among all persons. It is thus a form of consequentialism, meaning that the moral worth of an action is determined by its outcome. Utility is the good to be maximised and has been defined by various thinkers as happiness or pleasure (versus sadness or pain), though preference Utilitarians like Peter Singer define it as the satisfaction of preferences (Rosen 2003:23).

¹⁶⁹ As proposed by Locke

Jeremy Bentham derived the rule; the good is whatever brings the greatest happiness to the greatest number of people. However because the formulation recognised two different and potentially conflicting principles, Bentham dropped the second part and talked simply about 'the greatest happiness principle'. In fact victims of SV are not the greatest number of people, but criminal conduct should be a consideration for the greatest number of people. Utilitarianism is not just about criminal conviction but about humanity for men and women.

Negative Utilitarianism (NU) requires us to promote the least amount of evil or harm, or to prevent the greatest amount of suffering for the greatest number. Proponents argue that this is a more effective ethical formula, since the greatest harms are more consequential than the greatest goods. The founder of NU referred to an epistemological argument, 'It adds to clarity in the fields of ethics, if we formulate our demands negatively, i.e. if we demand the elimination of suffering rather than the promotion of happiness' (Popper 1945). Therefore, it could be that the implementation of the database could eliminate SV and rectify the issue.

In his essay *On Liberty*, John Stuart Mill argued that utilitarianism requires that political arrangements satisfy the 'liberty principle' (or harm principle), according to which 'the only purpose for which power can be rightfully exercised over any member of a civilized community, against his will, is to prevent harm to others' (Mill 1974:68). In regards to the DB, if collecting DNA can be viewed as causing harm, then this is justified because it may prevent future harm to others.

In order to overcome perceived shortcomings of both systems, several attempts have been made to combine utilitarianism with Kant's categorical imperative. For instance, James Cornman proposes that in any given situation we should treat as *means* as few people as possible, and treat as *ends* as many people as are thus then consistent with those *means*. He refers to this as the 'Utilitarian Kantian Principle' (Cornman 1982:355). Therefore the ends justify the means.

Other consequentialists may consider happiness an important consequence, but in addition, they argue that consequences such as justice or equality should also be valued, regardless if they increase happiness or not. The database may not increase happiness; however, as a system it could increase justice and confidence in our CJS. Ultimately SV is a social problem. If the social problem to be dealt with is violence, yet the way violence is represented is violent, there is clearly a major problem within our strategy of law. These problems are made more complex due to the highly sexed and racialised cultural scripts which inform our understanding. The importance of maintaining equality is essential for DNA collection so that it cannot be viewed as 'violent' and perhaps this is where consideration of a compulsory national DNA database should be encouraged. It is questionable how the ECtHR found retention of DNA profiles a greater harm than the benefits it brings.

Unfortunately, to confront patriarchal oppression, women cannot use the law and legal apparatus to seek justice 'when the language and procedures of these social processes and institutions are saturated with patriarchal beliefs and structures' (Dobash & Dobash 1992:518). However the use of the law must still be recognised as problematic and limited as a mechanism for change as it 'tends to frame issues in terms of individual pathology and, consequently, to offer individual remedies', and because 'the law has traditionally encompassed *men's* accounts of events because it is men who legislate and then interpret the law' (Gelsthorpe & Morris 1990:143-144).

The private sector should be subject to laws. However Farrell argues that no cosmetic changes can affect such an established social problem, 'the increase in police powers and the setting up of specially trained police units does little to prevent VAW. Social problems cannot be solved by the exercise of state force and increased use of prison detention. There is no simple penal solution for problems whose roots lie deep within the nature of society' (Farrell 1992:137).

However, although the DNA database could be seen as cosmetic, I have argued that within its implementation are various factors which combat the issue of SV. Firstly, the act of setting it up is showing recognition of a social problem. This effectively creates a discourse which would confront the social problem from within. Secondly, by asking people to submit their DNA, current attitudes towards ownership and privacy are being challenged and this could eventually change this attitude on a continuum with VAW. Thirdly, the very substance of DNA is so relevant to prosecuting cases of SV it can only give more power to women as victims.

Conclusion

Privacy does have inherent values applicable to areas of life which are not solely masculinist. I argue for the acceptance and establishment of another definition of privacy which is applicable to *some* attitudes and behaviours. In this chapter I have defended the DB against the sexed agenda of privacy. If a modern concept of privacy can be understood in terms of masculinity, resistance to the DB by human rights can also be understood in these terms. By resisting the collection of DNA and a system which could benefit cases of sexed violence, SV continues in a state of crisis and our CJS remains unsuccessful and patriarchal.

Implementation of the DB is a system which could improve prosecution rates and crime control. A DNA database for the public good is a moral argument and needs to be debated with fairness and sensitivity. DNA detection is undeniably part of our society and an essential tool for one of society's main priorities of crime control. 'The relevant question about surveillance today is not whether we should live in a surveillance society, but how' (McGrath 2004:2).

Importantly, all advances should be contested within a reasonable way. Authority has to have discretion and many aspects of privacy and civil liberties are essential to a happy human existence. The acceptance of a masculinist attitude to privacy is a cumulative process of small steps and changing discourse. This can be problematised to allow for DNA retention and DB development, and effectively mean improved crime control and changing attitudes to SV. Agency is critical, not anonymity. Unfortunately, however, this changing discourse has come too late and the recent ECtHR judgement has ruled against permanent retention of DNA profiles, out of respect for human rights and privacy. I propose that the Strasbourg court was ascribing to a form of privacy as masculinist in its extreme decision.

Education is also essential to facilitate understanding of DNA in forensic criminal cases. The media, which currently fuels unjustified fears, should be targeted to ensure fair dissemination of news. By recognising that our society has to embrace electronic surveillance systems, the fixation and fear of a big brother state can be addressed and the CJS can progress. 'It is rudimentary to 'avoid the value judgements about surveillance's threat to privacy' (McGrath 2004:9). Nonetheless, it is essential that some regulations remain in place and be governed by strict laws, such as the retention of DNA profiles only, as appose to

biological samples. The concerns raised throughout chapter 2 are mainly fears of a future, that without regulation, could become reality. Although I do not agree that one should act on their fears, but on their aspirations, it would be naive to ignore these possibilities. Therefore I will conclude by reinforcing the regulation of DB laws as forever critical. The ECtHR ruling may change the current policy on DNA collection and retention but this has not occurred yet...

Conclusion

Modern day society continues to fight against becoming a victim of crime. The availability of DNA profiling has proved successful in identifying individuals from evidence found at crime scenes, even where no fingerprints could be found. The evolution of DNA technology is sure to deter offenders, as the success of DNA profiling continues to prevent crime. The opportunities to make criminals feel vulnerable are immense and those opportunities must be seized. Furthermore, 'the presence of DNA can have additional benefits not represented in the statistics, such as reducing the time of the investigation, stopping criminals earlier in their careers and reducing subsequent court time (Andy Burnham MP cited in GeneWatch 2008:5).

The topics covered in this dissertation have covered a variety of disciplines and this is due to the very nature of the database which has legal, criminological, philosophical and sociological implications. I have tried to resolve the competing discourses in this dissertation by using the issue of sexed violence as a starting point. I have argued that with due consideration to all aspects of the database, it should, and could, be recognised as a tool which benefits cases of sexed violence just as well as other volume crimes.

In chapter 1, I demonstrated how the severity of sexed violence has been ignored by the criminal justice system and this has contributed to high levels of incidence and unacceptably low conviction rates. The Government has implemented several measures to affect a change in attitude towards women and rape, however these attitudes are deeply imbedded and unfortunately the majority of police policies have failed to meet targets and have not seen through with initial intentions. This inadvertently demonstrates a lack of concern towards the issue of rape and negative attitudes therefore remain – perpetuating the existence of the crime. There is conflict here because a database does not, in itself, confront stereotypes; however, perhaps the committed running of a system which could make a difference would show more serious conviction from the Government (and patriarchal system) in putting an end to the crime of rape. This may one day help to change attitudes, through recognition AND action.

This area of crime is in a state of crisis. Home Office initiatives have not yet been successful in improving this area of the law and the success from Specialist Domestic Violence Courts (SDVCs) and Independent Sexual Violence Advisers (ISVAs) is slow. The issue of consent and the overall burden of proof, as identified by Pateman¹⁷⁰ continues to hinder conviction in cases of SV. Furthermore, cultural issues around consent hinder the process of criminal justice. In 2002 Harman called for 'cultural change and criminal courts to take men's routine 'domestic' violence against women more seriously' (Womack, 2002). Effective prevention and early intervention is important, however, whilst nothing is currently being done to help, the NDNAD should be maximised as a tool of forensic identification by the CJS for success in cases of sexed violence.

In chapter 2, I gave a synopsis on the various changes in the law which have occurred to facilitate the taking and retention of DNA profiles and how these policies have been refuted by GeneWatch and the ECtHR. Despite the ECtHR ruling I stand by the fact that

¹⁷⁰ Pateman, C. (1989) *The Disorder of Women: Democracy, Feminism, and Political Theory*. Stanford University Press.

the majority of concerns raised by critics remain misunderstood and unfounded. Through the explanation of the differences between profiles and samples I showed that GeneWatch had not been proportionate in their argument and the media contribute to moral panics surrounding the database through apocalyptic claims. DNA news stories lend themselves to dramatisation. The sensationalism of journalistic rhetoric is ignorant of real issues and objective facts. And parochialism excludes groups such as Liberty, the Local Government Information unit, and university researchers, from contributing to discourse because they are not considered local. This is why GeneWatch adopts a subjective argument, so that it can be accepted within mainstream discourse.

Criminal experts such as Dr McCartney also think there is a reason to fear having your DNA on the database due to partial profiles and the personal cost of being involved with an investigation, such as the investigative techniques of familial searching (McCartney 2008). However I argued that the potential risks posed by the database are not justified as a reason to prevent or hinder its use, as these are based on fears of misuse rather than actual misuse. Critics of the NDNAD, although considerate to the maintenance of civil liberties, should recognise that the continual success in the detection of crime remains to benefit society as a whole. I provided statistics to detail the number of offenders who have been identified and convicted of crimes since the launch of the NDNAD in 1995. Production of such statistics can appear impressive and reassuring to the police, government and other agencies; yet behind every single statistic there inevitably lies a victim of crime, and it is they who will experience real reassurance knowing that justice has been done. This is the real proof that the National DNA Database has had an overwhelming impact on the detection of crime. Ultimately whilst the human rights of citizens are being acknowledged, the human rights of women as victims of violence are being ignored and this is the crucial issue.

It is necessary to be aware of the state as oppressor and dictator. Using this balanced understanding, the database could be adapted and accepted as a positive and effective tool for crime control, regulated by reasonable rules to restrict oppression. The continuous success of identification of offenders through DNA is paramount, as is the continuous development and enhancement of current techniques. In chapter 3, I identified how DNA databasing could improve the crisis area within criminal justice by securing more convictions thanks to a variety of improved forensic techniques and successful cold case reviews. I used the Pitchfork case as an example of the exoneration abilities of the database, and the tragic case of Kiszko provided justification for the CIPA 2001. Further to this, the permanent retention of DNA profiles should be accepted to achieve improved crime prevention and control for sexed violence. Development of the database could increase the number of rapes solved and consult some of the ethical issues about misrepresentation. I discussed deterrence theory and ask debate that the reduction of crime works whether it is due to increased detection and incapacitation of prolific offenders or through anticipatory conformity.

In chapter 4, I showed that although privacy has inherent values, these are not fundamental rights and have to be balanced against other interests. Some human rights considerations such as VAW are necessary and reasonable responses. However the human rights response to the DB in relation to Article 8 is not proportionate. What used to be considered a criminological tool of DNA profiles is now considered a databank containing thousands of poor innocent people. The ECtHR ruling implies that the reliability of DNA profiling and interpretation is no longer debatable, but that *possibilities* for misuse by the Government is the issue. The DB is battling against an intangible fear and wider moral perspective. So much ideology is at stake by intervening in such a sensitive debate and privacy concerns are being ideologically and politically manipulated.

Violence against women occurs under the guise of privacy. I postulated a theory of privacy as masculinist to explain why some human rights groups would attack a tool within the criminal justice system despite its invaluable contribution to crime detection. Furthermore, if DNA databasing *is* an infringement to our personal liberty and privacy, then this should be accepted as a 'reasonable sacrifice' for the benefits of improved sexed violence conviction success and a potential reduction in incidence.

In order to achieve full acknowledgment of violence against women, society and the criminal justice system alike should address conceptions of privacy as masculinist and accept that privacy risks within the database are justified by its criminological gains. Some human rights considerations hinder this progress where they emerge from a gendered (masculine) conception of privacy. The NDNAD can be a useful tool in aiding and securing convictions where a feminist theoretical framework supports women as victims of sexed crime, contrary to perspectives that see the database as counter to human rights.

Ultimately although the database has proved successful, the efficiency and future of the database depends on the implementation of various improvements. A compromise is necessary between operation and regulation. Tackling sexed violence is the crucial matter, therefore the potential risks discussed in chapter 2 need to be minimised. Unfortunately the lack of transparency by the Home Office and the failures which occurred during the development phase¹⁷¹ has had negative consequences for the DB future via the ECtHR ruling. I hope one of the outcomes from this ruling include improvements within police performance to ensure the effective running of the DB from now on. 'The strengths of the DNA database can only be safeguarded if they enjoy the confidence and trust of the public' (Smith, J. H.O. 2008). There needs to be a balance between liberty, autonomy, privacy, equality and informed consent and to achieve this, we need mechanisms which ensure that systems are used fairly and equitably and in accordance with democratic principles.

Firstly it is essential that DNA samples are tested correctly and efficiently, this means that the collection, storage and analysis must be exacting, thorough and constant. Communication between the police and the forensic science service is essential to ensure that contamination does not occur. There needs to be a swifter delivery of forensic material for analysis by the police or laboratories. 'Pinch points must be identified, to enable more forensic data to be collected and to make use of it more quickly and effectively' (H.O 2005:11).

Secondly, expert opinion is persuasive and this has an effect on juror's understanding therefore the court is not the ideal place for scientific debate. Money and research should be going into helping courts understand DNA evidence and providing expertise for the defence. Education is essential for every citizen within the UK so that an objective understanding of DNA forensic evidence can be achieved. The value of discourse needs to occur so that the database can work for victims of sexed violence through the justice system.

¹⁷¹ Incompetent errors made by the police and Home Office, such as the Campbell oversight and failed merger with the PNC

Thirdly it is absolutely fundamental that more crime scene stains are sampled and stored on the database. Recorded crime in 2006/07 was 5,428,273, but only 3,976,090 profiles are stored on the database (GeneWatch 2008:7) so I would encourage the retention of crime scene samples in every instance. I conclude that once the required improvements are made to the NDNAD; there will be an increased number of crimes detected.

Finally it is necessary to avoid falling into the trap of technological determinism of the dystopians; that the new technologies mark the move towards an Orwellian future of totalitarian control, because this is not inevitable. The database should be a reflexive and utilitarian system. I find that the existence of the database is pioneering and advantageous on many levels. 'The idea of surveillance as a new space – with different possibilities for communication and behaviour – is liberating' (McGrath 2004:viii). Lyon says that 'there is an urgent need to consider how the new technologies of mass surveillance can be harnessed to encourage participation rather than exclusion, strengthen personhood rather than diminish it, and be used for benevolent rather than malign purposes' (Lyon 1994:230).

Home Secretary Jacqui Smith doesn't believe for one moment that we are a nation under CCTV in what critics call a surveillance society. Smith says 'surveillance strengthens the frontline against crime, with handheld computers and mobile fingerprint devices meaning the police can spend more time out of the station. It is clear that we need to respond and adapt to technological change with a proportionate, fair and common sense approach' (Smith, J. H.O. 2008).

Two main issues have been identified as affecting the low prosecution rate of sexed violence. Firstly, lack of evidence, and secondly, consent. If the NDNAD is able to help solve the issue of evidence, then we are one step further in dealing with the more cultural issue of consent. Thus, if the value of the NDNAD could be portrayed as just as valuable to SV as it is to volume crime, and also as a powerful relentless operation, perhaps this perceived intent to cease SV would also transfer into the familial home, where it is most common. Tackling offenses like rape require a strong approach.

There has not been any research conducted into the effect of DNA evidence (presence or absence) in cases of sexed violence in the UK and this also reflects attitudes to sexed violence as invalid. Therefore I cannot provide a true figure of the difference this makes in a court. Here is a crucial opportunity for future research. Although there is value in the empirical evidence of the DB, more work needs to be done in order to make the value operative.

Conviction success for cases of sexed violence is due to evidence and guilty pleas and DNA databasing contributes to this end. I would hope that HR groups would cease in their attack of this system with regards to the benefits it could bring to violent crime and court justice. Unfortunately the ECtHR ruling prevents this desired outcome.

In conclusion, some human rights objections around the privacy risks posed by the NDNAD should still be contested and accepted in order to support victims of sexed violence through improved conviction rates and a possible reduction in incidence. By acknowledging the benefits of the database for this end, further acknowledgment of violence against women can be achieved and this could also transfer into the familial home.

It could be that the Government decides not to implement the proposals set in their consultation paper. Chris Sims, ACPO lead on Forensic Science and Chief Constable of Staffordshire Police, said 'the police service recognises that the use of personal information

by the state poses ethical questions, even when that use is in the pursuit of justice. DNA technology is a powerful weapon against crime and its use must follow principles of good policing. But we should also be clear: any outcome which reduces the ability of the service to protect the public and bring those guilty of serious crimes to justice is a cause for serious concern and careful consideration' (ACPO Latest News 2009).

Bibliography

Books

Bailyn, B., 1992. *The Ideological Origins of the American Revolution*. Cambridge: The Harvard University Press.

Burke, R. H., 2001. *An Introduction to Criminological Theory*. Willan Publishing.

Clark A.K., 1983. *The Sexual Dynamics of History: Men's Power, Women's Resistance*. The London Feminist History Group. Flute Press.

Cornman, J. W., 1982. *The Problem of Justifying an Ethical Standard*. In: Cornman, J. W., Lehrer, k., & Pappas, G. S., (eds) *Philosophical Problems and Arguments: An Introduction*. 3rd ed. Hackett Publishing Co.

Croall, H., 1998. *Crime and Society in Britain*. Longman. Pearson Education Limited.

Crossman, G., et al., 2007. *Overlooked Surveillance and personal privacy in modern Britain*. Liberty. The Nuffield Foundation.

D'Cruze S., 1998. *Crimes of Outrage: Sex, Violence and Victorian working women*. London: UCL Press

Davidson, J. O. & Layder, D., 1994. *Methods Sex And Madness*. London: Routledge.

Elliott, C., & Quinn, F., 2007. *English Legal System*. 8th ed. London: Pearson Longman.

Farrell, A., 1992. *Crime, Class & Corruption. The politics of the police*. London: Bookmarks.

Foucault, M., 1977. *Discipline and Punish: The Birth of the Prison*. London: Allen Lane.

Foucault, M., 1997. 'Two Lectures'. In: Gordon, C., *Power/Knowledge*. Brighton: Harvester.

Gavey, N., 1989. *Feminist Poststructuralism and Discourse Analysis*. *Psychology of Women Quarterly*.

Gelsthorpe, L. & Morris, A., 1990. (eds) *Feminist Perspectives in Criminology*. Buckingham. Open University Press.

Gelsthorpe, L., 2001. *Crime Control Model*. In: McLaughlin, E. & Muncie, J., 2001. (eds) *The Sage Dictionary of Criminology*. London: Sage Publications.

Heidensohn, F., 2002. *Gender and Crime*. In: Maguire, M., Morgan, R. & Reiner, R., 2002. (eds) *The Oxford Handbook of Criminology*. 3rd ed. Oxford University Press.

Hollway, W., 1981. 'I Just Wanted to Kill A Woman' Why? *The Ripper and male Sexuality*'. *Feminist Review*.

Howe, A., 1998. *Sexed Crime In The News*. The Federation Press.

Hudson, 1996. In: Maguire, M., Morgan, R. & Reiner, R., 2002. (eds) *The Oxford Handbook of Criminology*. 3rd ed. Oxford University Press.

Jefferson, T. (2001) *Hegemony* in McLaughlin, E. & Muncie, J. (2001) (eds) *The Sage Dictionary of Criminology*. London: Sage Publications.

Jeffreys, A., 1993. *Genetic Fingerprinting: Applications and Implications*. In: Holland, B., and Kyriacou, C., (eds) *Genetics and Society*. Workingham: Addison Wesley.

Kaye, B. H., 1995. *Science and the Detective* Selected Reading In Forensic Science. VCH

Kuriansky, J. A. & Little, K., 1998. *Assessing Justice System Response to Violence Against Women. A Tool for Law Enforcement, Prosecution and the Courts to use in Developing Effective Responses*.

Maguire, M., Morgan, R. & Reiner, R., 2002. (eds) *The Oxford Handbook of Criminology*. 3rd ed. Oxford University Press.

McGrath, J. E., 2004. *Loving Big Brother Performance, Privacy and Surveillance Space*. London: Routledge.

McLaughlin, E. & Muncie, J., 2001. (eds) *The Problem of Crime*. 2nd ed. London: Sage Publications.

McLaughlin, E. & Muncie, J., 2001. (eds) *The Sage Dictionary of Criminology*. London: Sage Publications.

Mill, J.S., 1974. *On Liberty*. Himmelfarb. Penguin Classics.

Miller, H., 1995. *Traces of Guilt. Forensic science and the fight against crime*. BBC Books.

Norris, C. & Armstrong, G., 1999. *The Maximum Surveillance Society The Rise of CCTV*. New York: Oxford.

Pease, K., 2001. *Crime Reduction*. In: Maguire, M., Morgan, R. & Reiner, R., 2002. (eds) *The Oxford Handbook of Criminology*. 3rd ed. Oxford University Press.

Pilnick, A., 2002. *Genetics and Society an introduction*. Open University Press.

Popper, R. K., 1945. *The Open Society and its Enemies*. London.

Radford, J., 2001. *Radical Feminism*. In: McLaughlin, E. & Muncie, J., 2001. (eds) *The Sage Dictionary of Criminology*. London: Sage Publications.

Redmayne, M., 2001. *Expert Evidence and Criminal Justice*. Oxford University Press.

Rosen, F., 2003. *Classical Utilitarianism from Hume to Mill*. Routledge.

Saraga, E., 2001. *Dangerous Places: The Family as a site of Crime*. In Muncie, J. &

- McLaughlin, E., 2001. (eds) *The Problem of Crime*. 2nd ed. London: Sage Publications.
- Smart C., 1976. *Women, Crime and Criminology, A Feminist Critique*. London: Routledge & Kegan Paul.
- Smart C., 1999. *Women, Crime and Criminology, A Feminist Critique*. London: Routledge & Kegan Paul.
- Stanko, E. A., 2002. *Ordinary experiences*. In: Jewkes, Y. & Letherby, G., 2002. (eds) *Criminology: A Reader*. London: Sage Publications.
- Strauss, L., 1952. *Persecution and the Art of Writing*. Chicago: The University of Chicago Press.
- Temkin, J., 2002. *The Oxford Handbook of Criminology*. 3rd ed. Oxford University Press.
- Thornton, M., 1989. *Hegemonic Masculinity and the Academy*. International Journal of the Sociology of Law.
- Wacks, R., 1994. *Personal Information: Privacy and the Law*. Oxford University Press.
- Wallace, R., 1997. *International Human Rights text & materials*. London: Sweet & Maxwell.
- Williams, R., Johnson, P. & Martin, P., 2004. *Genetic Information & Crime Investigation Social, Ethical and Public Policy Aspects of the Establishment, Expansion and Police Use of the National DNA Database*. The Wellcome Trust.
- Young, A., 1998. *Violence as seduction: Enduring genres of rape*. In: Howe, A., 1998. (ed) *Sexed Crime In The News*. The Federation Press.

Journals

- Briody, M., 2002. The Effects of DNA Evidence on Sexual Offence Cases in Court. *Current Issues in Criminal Justice* 14 (2) pp.159-181
- Jeffreys, A., October 2005. *Genetic Fingerprinting*. Nature Medicine. 11(10) pp.1-5
- Johnson, P. & Williams, R., 2004. Wonderment and dread: representations of DNA in ethical disputes about forensic DNA databases. *New Genetics and Society*, 23(2) pp.205-223
- Phillipson, G. & Fenwick, H., 2000. Breach of Confidence as a Privacy Remedy in the Human Rights Era. *Modern Law Review*, 63 (5), pp.660-693, at 662.
- Simoncelli, T., 2004. Retreating Justice Proposed expansion of federal DNA database threatens civil liberties. *GeneWatch*, 17(2), pp.3-6. (GeneWatch UK should not be confused with The Council for Responsible Genetics in the USA which publishes a Newsletter called GeneWatch)
- Zabell, S. L., 2005. Fingerprint Evidence. *Journal of Law and Policy*, 13(1), pp.143-179.

Reports

Campbell, 2007. *It's In Our Hands: Stop Violence against Women*. Amnesty International.

Dickinson, J. & Pierce, A., 2005. *Maximising the Opportunities for Sharing DNA Information across Europe Seminar*. Home Office Report 24–26.

H M Crown Prosecution Service Inspectorate, 2002. A Report on the Joint Inspection into the Investigation and Prosecution of Cases involving Allegations of Rape.

H M Government, February 2008. Saving Lives. Reducing Harm. Protecting the Public. An Action Plan for Tackling Violence 2008-11.

HMCPSI - HM Crown Prosecution Service Inspectorate (HMCPS) and HM Inspectorate of Constabulary (HMIC), 2007. *Without consent: A report on the joint review of the investigation and prosecution of rape offences*.

Home Office, October 2005. DNA Expansion Programme 2000–2005: *Reporting achievement*. Forensic Science and Pathology Unit.

Home Office, July 2008. Statistical Bulletin.

Home Office, October 2005. *Maximising the Opportunities for Sharing DNA Information across Europe*. Seminar Report 24–26, Warwickshire, UK. pg. 7

Kelly, L., Lovett, J. & Regan, L., 2005. *A gap or a chasm? Attrition in reported rape cases*. Home Office Research Study 293.

Kershaw, C., Nicholas, S. & Walker, A., 2008. *Crime in England and Wales 2007/08: Findings from the British Crime Survey and police recorded crime*.

Law Commission, 1981. *'Breach of Confidence'*, Report 110, Cmnd.8388. HMSO. pg. 10

Nicholas, S., Povey, D., Walker, A. & Kershaw, C., 2005. *Crime in England and Wales 2004/2005*. Home Office Statistical Bulletin.

Nuffield Council on Bioethics. September 2007. The forensic use of bioinformation: ethical issues. SUMMARY OF REPORT

Nuffield Council on Bioethics. September 2007. The forensic use of bio-information: Ethical questions over police use of DNA. EXECUTIVE SUMMARY

Report of the Committee on Privacy and Related Matters, 1990. Cmnd.1102. HMSO.

Staley, K., 2005. *The Police National DNA Database: Balancing Crime Detection, Human Rights and privacy*. A Report by GeneWatch UK.

Steventon, B., 1993. *The Ability to Challenge DNA evidence*. Research Study 9. The Royal Commission on Criminal Justice. London: HMSO.

The FSS, November 2002. *Forensic Bulletin*. Issue 2.

Internet

AIUK, 2005. Amnesty International, Stop Violence Against Women Statistics.

Amnesty International Website, [internet].

Available at: <http://www.amnesty.org.uk/content.asp?CategoryID=10309>

[Accessed 03 April 07]

Aldhous, P., 2008. Genetic data withdrawn amid privacy concern.

New Scientist Website, [internet] 01 September.

Available at: <http://www.newscientist.com/channel/life/genetics/dn14637-genetic-data-withdrawn-amid-privacy-concerns.html>

[Accessed 25 September 08]

Association of Chief Police Officers Latest News, 2008 Quarter 4. ACPO comment on European Court of Human Rights ruling. Ref:288/08.

Association of Chief Police Officers Website, [internet] 4 December

Available at: http://www.acpo.police.uk/pressrelease.asp?PR_GUID={6F49FDCA-9150-4278-A5D7-9368DCF93CE4}

[Accessed 24 September 2009]

Association of Chief Police Officers Latest News, 2009 Quarter 3. ACPO comment on consultation of DNA Database. Ref:50/09.

Association of Chief Police Officers Website, [internet] 7 May

Available at: http://www.acpo.police.uk/pressrelease.asp?PR_GUID={B1F9EBA6-432B-45AE-AFCD-F151D621EE1E}

[Accessed 24 September 2009]

Ballad, M., 2008. DNA database built on deceit.

The Inquirer Online, [internet] 28 June.

Available at: <http://www.theinquirer.net/gb/inquirer/news/2008/06/27/dna-database-built-deceit>

[Accessed 27 September 2008]

BBC News, 2006. Rape victim video plan for trials.

BBC News Online, [internet].

Available at: <http://news.bbc.co.uk/1/hi/uk/4855310.stm>

[Accessed 01 April 2006]

BBC News, 2006. Panorama: Rape on trial.

BBC News Online, [internet] 25 June.

Available at: <http://news.bbc.co.uk/1/hi/programmes/panorama/5099644.stm>

[Accessed 15 November 2007]

BBC NEWS, 2006. Pupil Fingerprint plans defended.

BBC News Online, [internet] 12 September.

Available at: http://news.bbc.co.uk/1/hi/scotland/south_of_scotland/5337734.stm
[Accessed 15 November 2007]

BBC NEWS, 2006.
BBC News Online, [internet] 01 November.
Available at: http://news.bbc.co.uk/go/pr/fr/-/1/hi/uk_politics/6104876.stm
[Accessed 15 November 2007]

BBC News, 2007. Panorama: Give us your DNA.
BBC News Online, [internet] 24 September.
Available at: <http://news.bbc.co.uk/1/hi/programmes/panorama/7010687.stm>
[Accessed 15 November 2007]

BBC News, 2007. All UK 'must be on DNA database'.
BBC News Online, [internet] 5 September.
Available at: <http://news.bbc.co.uk/1/hi/uk/6979138.stm>
[Accessed 15 November 2007]

BBC News, 2008. Police spokesman sparks DNA row.
BBC News Online, [internet] 16 March.
Available at: <http://news.bbc.co.uk/1/hi/uk/7299549.stm>
[Accessed 15 November 2007]

BBC News, 2008. DNA database 'breach of rights'
BBC News Online, [internet] 4 December
Available at: <http://news.bbc.co.uk/1/hi/uk/7764069.stm>
[Accessed 24 September 2009]

Crossman, G., 2008. DNA Retention Position Letter.
Liberty Website, [internet] March.
Available at: <http://www.liberty-human-rights.org.uk/issues/3-privacy/pdfs/dna-letter-to-keith-vaz-mp.pdf>
[Accessed 29 September 2008]

European Parliament, 2008. *Session Document*. A6-0099. [Online]
Available at: http://www.eurowarrant.net/documents/cms_eaw_id1685_4_A6.0099.2008.pdf
[21 October 2008]

Fairclough, A. 2009. The government should be ashamed of its DNA retention regime.
The Guardian Online, [internet] 7 May.
Available at: <http://www.guardian.co.uk/commentisfree/libertycentral/2009/may/07/dna-retention-privacy>
[Accessed 24 September 2009]

Fawcett Society. Rape: The Facts.
Fawcett Society Website, [internet].
Available at: <http://www.fawcettsociety.org.uk/>
[Accessed 2 November 2008]

Ford, R., 2007. DNA database failures meant 200 offences went undetected.
The Times Online, [internet] 18 May.
Available at: <http://www.timesonline.co.uk/tol/news/uk/crime/article1805680.ece>
[Accessed 15 November 2007]

Forensic Science Service. Working to improve conviction rates for rape.
Forensic Science Service Website, [internet].
Available at:
http://www.forensic.gov.uk/forensic_t/inside/news/list_press_release.php?case=65&y=2007
[Accessed 2 March 07]

The Forensic Science Service, 2005. Press Release: COLD CASES CRACKED – one year on.
Solve the Crime Website, [internet] 12 July.
Available at:
http://www.solvethecrime.co.uk/forensic_t/inside/news/list_press_release.php?case=35&y=2005
[12 April 2006]

The Forensic Science Service, 2004. Press Release: DNA technology to progress more cold cases.
Forensic Science Service Website, [internet] 08 December.
Available at:
http://www.forensic.gov.uk/forensic_t/inside/news/list_press_release.php?case=31
[12 April 2006]

The Forensic Science Service, 2007. Casefiles: Colin Pitchfork - first murder conviction on DNA evidence also clears the prime suspect.
Forensic Science Service Website, [internet].
Available at: http://www.forensic.gov.uk/forensic_t/inside/news/list_casefiles.php?case=1
[Accessed 17 September 2008]

Forensic Science Service, 2007. Press Release: Celebrating cold case success.
Forensic Science Service Website, [internet] 12 November.
Available at:
http://www.forensic.gov.uk/forensic_t/inside/news/press%20releases%202007.htm#top
[19 May 2008]

The Forensic Science Service, 2006. Press Release: Innovative DNA techniques help convict Voisey.
Forensic Science Service Website, [internet] 01 November.
Available at:
http://www.forensic.gov.uk/forensic_t/inside/news/list_press_release.php?case=67&y=2006
[19 May 2008]

The Forensic Science Service, 2006. Press Release: DNA breakthrough helps trap rapist.
Forensic Science Service Website, [internet] 22 November.
Available at:
http://www.forensic.gov.uk/forensic_t/inside/news/list_press_release.php?case=61&y=2006
[19 May 2008]

Forensic Science Service, 2006. Press Release: Sex offender brought to justice with the help of a new forensic technique.

Forensic Science Service Website, [internet] 22 August.

Available at:

http://www.forensic.gov.uk/forensic_t/inside/news/list_press_release.php?case=52&y=2006

[19 May 2008]

Forensic Science Service, 2005. Press Release: Advances in DNA help to jail serial sex offender.

Forensic Science Service Website, [internet] 19 September.

Available at:

http://www.forensic.gov.uk/forensic_t/inside/news/list_press_release.php?case=41&y=2005

[19 May 2008]

Forensic Science Service, 2005. Press Release: Operation Advance brings rapist to justice.

Forensic Science Service Website, [internet] 13 September.

Available at:

http://www.forensic.gov.uk/forensic_t/inside/news/list_press_release.php?case=40&y=2005

[19 May 2008]

GeneWatch UK. The UK Police National DNA Database →The Marper Case.

GeneWatch UK Website, [internet].

Available at: <http://www.genewatch.org/sub-563146>

[Accessed 24 September 2009]

The Guardian, 2008. DNA matches, CCTV film and a pattern of sightings - the case against Wright.

The Guardian Online, [internet] 17 January.

Available at: <http://www.guardian.co.uk/uk/2008/jan/17/ukcrime.uknews41>

[12 November 2008]

The Guardian, 2007. Study questions reliability of fingerprint evidence. *The Guardian Online*, [internet] 23 March.

Available at: <http://www.guardian.co.uk/science/2007/mar/23/crime.penal>

[12 November 2008]

The Guardian, 2008. Regulator backs use of DNA technique in court cases.

The Guardian Online, [internet] 11 April.

Available at: <http://www.guardian.co.uk/uk/2008/apr/11/law.ukcrime>

[12 November 2008]

Home Office Science and Research. The National DNA Database.

Home Office Website, [internet].

Available at: <http://www.homeoffice.gov.uk/science-research/using-science/dna-database/>

[Accessed 01 April 2006]

Home Office Science & Research. Using science to fight crime.

Home Office Website, [internet].

Available at: <http://www.homeoffice.gov.uk/science-research/using-science/?version=1>

[Accessed 01 April 2006]

Home Office. Victims of Crime; Sexual offences.

Home Office Website, [internet].

Available at: <http://www.homeoffice.gov.uk/crime-victims/reducing-crime/sexual-offences/>

[Accessed 01 April 2006]

Home Office. Police, Science and Technology

Home Office Website, [internet].

Available at: <http://www.homeoffice.gov.uk/science-research/using-science/police-science-tech/>

[Accessed 01 September 2008]

Home Office Press Briefing, 2009. DNA.

Home Office Website, [internet] 2 June.

Available at: www.crimereduction.homeoffice.gov.uk/policing251.doc - 2009-06-02

[Accessed 24 September 2009]

Home Office Press release, 2005. Supporting Victims of Sexual Crime .

Home Office Website, [internet] February.

Available at: http://press.homeoffice.gov.uk/press-releases/Supporting_Victims_Of_Sexual_Cri?version=1

[Accessed 01 April 2006]

Home Office. The National DNA Database Annual Report 2005-2006. *Home Office Website*, [internet].

Available at: <http://www.homeoffice.gov.uk/documents/DNA-report2005-06.pdf>

[30 November 2006]

Human Genetics Commission. Our Work: National DNA Database Working Group.

Human Genetics Commission Website, [internet].

Available at: <http://www.hgc.gov.uk/Client/Content.asp?ContentId=809>

[Accessed 29 September 2008]

Human Genetics Commission. Our Work: Monitoring Groups – Identity Testing.

Human Genetics Commission Website, [internet].

Available at: <http://www.hgc.gov.uk/Client/Content.asp?ContentId=253>

[Accessed 29 September 2008]

Human Genetics Commission, 2008. Genes are people's personal data that should not be used against them for anything.

Human Genetics Commission Website, [internet] 22 September.

Available at: http://www.hgc.gov.uk/Client/news_item.asp?Newsid=100

[Accessed 29 September 2008]

The Innocence Project, 2008.

The Innocence Project Website, [internet].

Available at: <http://www.innocenceproject.org/Content/351.php> [Accessed 8 September 2008]

Interpol DNA Profiling

Available at: <http://www.interpol.int/Public/Forensic/dna/default.asp>

[12 November 2008]

Interpol Factsheet: *DNA Gateway (COM/FS/2007-09/FS-01)* [Online]

Available at: <http://www.interpol.int/Public/ICPO/FactSheets/FS01.pdf>

[12 November 2008]

Interpol Factsheet: *Databases (COM/FS/2008-07/GI-04)* [Online]

Available at: <http://www.interpol.int/Public/ICPO/FactSheets/GI04.pdf>

[12 November 2008]

Interpol, 2006. *Annual Report 2006*. [Online]

Available at: <http://www.interpol.int/Public/ICPO/InterpolAtWork/iaw2006.pdf>

[12 November 2008]

Jenkins, R., 2007. Conviction too late for victim of 'worst miscarriage of justice of all time'. *The Times Online*, [internet] 13 November.

Available at: <http://www.timesonline.co.uk/tol/news/uk/crime/article2859619.ece>

[12 November 2008]

Jenkins, R., 2007. One-in-a-billion DNA match links suspect to girl's murder, 32 years on. *The Times Online*, [internet] 24 October.

Available at: <http://www.timesonline.co.uk/tol/news/uk/crime/article2726748.ece>

[12 November 2008]

Matthews, R., 2006. The Informer in Your Blood.

The First Post Website, [internet] 02 November.

Available at: <http://www.thefirstpost.co.uk/index.php?menuID=2&subID=1066>

[24 May 2008]

McKie, R., 2004. Meet the DNA genius who fears the dark side of his discovery.

The Guardian Website, [internet] 08 August.

Available at:

http://www.guardian.co.uk/genes/article/0,2763,1278710,00.html#article_continue

[24 May 2008]

Metropolitan Police Service. Project Sapphire, 2002. A strategy for improving victim care and investigation of rape.

Metropolitan Police Website, [internet].

Available at: <http://www.met.police.uk/sapphire/>

[Accessed 4 August 2006]

National Policing Improvement Agency. DNA database.

National Policing Improvement Agency Website, [internet].

Available at: <http://www.npia.police.uk/en/8934.htm>

[Accessed 01 September 2008]

National Policing Improvement Agency. Dispelling DNA myths.

National Policing Improvement Agency Website, [internet].

Available at:

http://www.npia.police.uk/en/9818.htm#Being_on_the_database_makes_me_a_criminal
[Accessed 01 September 2008]

Nuffield Council on Bioethics, 2008. Press releases: Nuffield Council statement on DNA Database ruling.

Nuffield Council on Bioethics Website, [internet] 5 December.

Available at:

http://www.nuffieldbioethics.org/go/ourwork/bioinformationuse/pressrelease_497.html

[Accessed 24 September 2009]

The Observer, 2008. Put young children on DNA list, urge police. *The Guardian Online*, [internet] 16 March.

Available at: <http://www.guardian.co.uk/society/2008/mar/16/youthjustice.children>

[24 May 2008]

[OUT-LAW.COM](http://www.theregister.com), 2007. 'All-in' DNA database plan hinges on human rights case.

The Register Website, [internet] 10 September.

Available at: http://www.theregister.co.uk/2007/09/10/dna_database_echr_case/

[24 May 2008]

Post-Conviction DNA Analysis

Available at: <http://www.exploredna.co.uk/post-conviction-dna-analysis.html>

[24 May 2008]

The Register, 2007. 100,000 'erroneous' records on DNA database. Load failures of 26,000 are part of the problem.

The Register Website, [internet] 17 May.

Available at: http://www.theregister.co.uk/2007/05/17/dna_v_rozzers/

[24 May 2008]

Smith, J. Home Office Press Office Speeches & Statements, 2008. Protecting rights, protecting society.

Home Office Website, [internet], 16 December

Available at: <http://press.homeoffice.gov.uk/Speeches/home-sec-protecting-rights>

[Accessed 24 September 2009]

Sturcke, J. 2009. DNA pioneer condemns plans to retain data on innocent.

The Guardian Online, [internet] 7 May.

Available at: <http://www.guardian.co.uk/politics/2009/may/07/dna-database-plans-condemned>

[Accessed 24 September 2009]

Tendler, S., 2006. DNA pioneer accuses the police of being overzealous.

The Times Online, [internet] 02 November.

Available at:

<http://business.timesonline.co.uk/tol/business/law/public/article622639.ece?token=null&offset=0>

[1 November 2008]

Thisislondon.co.uk, 2007. Criminals escape justice as bungling police leave 26,000 DNA samples lying around.

This is London Website, [internet] 17 May.

Available at: <http://www.thisislondon.co.uk/news/article-23396711-details/Criminals%20escape%20justice%20as%20bungling%20police%20leave%2026,000%20DNA%20samples%20lying%20around/article.do>

[1 November 2008]

Tighe, A., 2006. Ensuring justice for rape victims.

BBC News Online, [internet] 29 March.

Available at: <http://news.bbc.co.uk/1/hi/uk/4858758.stm>

[Accessed 01 April 2006]

The Times, 2007. Life for serial rapist left free to prey on women by DNA blunder.

The Times Online, [internet] 16 October.

Available at:

<http://www.timesonline.co.uk/tol/news/uk/crime/article2666591.ece>

[1 November 2008]

Times Online, 2008. Scientists' elation at finding DNA that led to a murderer.

The Times Online, [internet] 22 February.

Available at:

<http://www.timesonline.co.uk/tol/news/uk/crime/article3410814.ece?token=null&offset=12&page=2>

[1 November 2008]

Times Online, 2007. EU to share DNA and fingerprint evidence.

The Times Online, [internet] 12 June.

Available at: <http://www.timesonline.co.uk/tol/news/world/europe/article1922264.ece>

[1 November 2008]

Travis, A. 2009. Police told to ignore human rights ruling over DNA database

The Guardian Online, [internet] 7 May.

Available at: <http://www.guardian.co.uk/politics/2009/aug/07/dna-database-police-advice>

[Accessed 24 September 2009]

WHO, 2002. Violence prevention, Fact Sheets.

World Health Organisation Website, [internet].

Available at:

http://www.who.int/violence_injury_prevention/violence/world_report/factsheets/en/index.html

[04 April 2006]

Williams, C., 2008. *Gordo's DNA database claims branded 'ridiculous'*.

The Register Website, [internet] 29 June.

Available at:

http://www.theregister.co.uk/2008/06/29/brown_dna_database_innocent_genewatch/page2.html

[Accessed 2 September 2008]

Yorshire Post, 2008. Prostitute killer 'should end life in prison'.

The Yorkshire Post Website, [internet] 11th September.

Available at: <http://www.yorkshirepost.co.uk/news/VIDEO-Prostitute-killer-39should->

[end.3804437.jp](#)

[1 November 2008]

Legal Cases

Douglas and Others v Hello! Ltd [2003] 3 All ER 996

Magazine articles

New Scientist magazine, issue 2663 06 July 2008

Presentations

Presentation by Dr Carole McCartney. 'Forensic DNA: Sword, Shield & Sentinel?' Unpublished paper given at The University of Central Lancashire 16th April 2008.

Presentation by Professor Sir Alec Jeffreys. 'Genetic Fingerprinting' given at The University of Central Lancashire 21st February 2008

Television Programmes

Panorama 'Give Us Your DNA', 2007. [TV programme] BBC, BBC1, 24 September 2007

Panorama 'Fingerprints in the dock', 2006. [TV programme] BBC, BBC1, 28 May 2006

Newspapers

Lee, A., 2006. The DNA detectives hunting our most wanted criminals. The Daily Express 22 July. p.22-23

Sunday Express, May 7 2006

Daily Express, July 2006

Other

Parliamentary Office of Science and Technology. Postnote. February 2006. Number 258. The National DNA Database

Parliamentary Office of Science and Technology, February 2006, *The National DNA Database*, Postnote, Number 258

The Forensic Science Service (UK), *DNA – PRESENT & CORRECT, A Guide to DNA Profiling*

Lake, T. Chief Constable, Lincolnshire Police, Dated 13 February 2006

Dobash & Dobash 1992 cited in The Oxford Handbook of Criminology 2002

ACPO DNA & Fingerprint Retention Project "Exceptional Case Procedures for Removal DNA, Fingerprints and PNC Records" 27/01/06

GeneWatch UK 2008, 27 June. Briefing: Would 114 murderers have walked away?

Home Office, DNA Liaison Panel, Issue 42, January 2006
<http://www.genewatch.org/>