



MEDICAL GENETICS, LAW AND ETHICS

**Justice Elizabeth Bennett
Court of Appeal of British Columbia**

BORN CRIMINALS

- Cesare Lombroso, Italian criminologist (1835-1909) was convinced that some people were born criminal and could be identified by physical characteristics: sloping forehead, large ears, asymmetrical face, excessive length of arms, asymmetry of the cranium Excessive use of tattooing



STILL GUILTY



MARIA BARBERI AKA BARBELLA

- Maria Barberi was the first woman sentenced to death in 1896
- One cad named Domenico Cataldo seduced young Maria, and she lived with him on his promise to marry her
- When he refused, and mocked her, she slit his throat
- She was convicted and sentenced to death
- The Court of Appeal in New York ordered a new trial



- The New York Journal ran a series of drawings of her hands, ears and mouth showing, based on recent criminology findings (Lombroso perhaps) she was not a degenerate criminal
- However, her defence was that she was from a family of degenerates and had psychical epilepsy
- The defence produced a huge family tree demonstrating a long history of drunks and mad relatives



- During the trial, phrenologists testified, and the prosecution gave the lead witness for the defence diagrams of three heads – the doctor confirmed they were all abnormal: President Grover Cleveland, Cornelius Vanderbilt and the trial judge
- After a three week trial, and dozens of doctors testifying, the jury took 40 minutes to acquit



FUNDAMENTAL PRINCIPLES

- Modern criminal law is based on moral blameworthiness or responsibility
- “Criminal liability for a particular result is not justified except where the actor possesses a culpable state of mind”
- *R. v. Martineau*, [1990] 2 S.C.R. 633



- The basic concern of the criminal law is that criminal responsibility be ascribed ... only to those persons acting in the knowledge of what they were doing, with the freedom to choose, would bear the burden of stigma of criminal responsibility.
- *R. v. Ruzic*, [2001] 1 S.C.R. 687 at para. 34



- Criminal law is therefore founded on “free will”
- The question of moral blameworthiness or responsibility also applies to the sentencing process.
- S. 718.1 *Criminal Code*
- A sentence must be proportionate to the gravity of the offence and the responsibility of the offender.



DEFENCES – EXCUSE

- Intoxication (diminished responsibility)
- Insanity (not blameworthy)
- Juvenile (diminished responsibility)
- Non-insane automatism (complete excuse)
- Those who do not have the capacity to freely choose are held less blameworthy



SO-CALLED GENETIC DEFENCE

- In 1993 Hans Brunner identified a Dutch family with a lengthy familial history of males acting aggressively and violently
- The males had a genetic defect – monoamine oxidase A (MAO-A) deficiency



STEPHEN MOBLEY

- Stephen Mobley killed a store attendant in a robbery. He was a brutal and violent man
- His family members were either extremely violent or extremely successful
- Lawyers attempted to use behavioural genetics to set aside the death penalty
- Widely publicized case and created considerable hand-wringing with headlines “Man’s Genes Made Him Kill” as typical
- Warrior Gene



- What does this mean for the foundation of criminal law
- Some have suggested that we need to re-think our entire focus on free will and responsibility
- Since Mobley's case in 1994, behavioural genetics is slowly being received in the court



INITIAL CONCERNS – DENNO #1

- 1) the historical association of genetic evidence with abuses by the Nazis during the Holocaust
- 2) the meaning accorded the evidence in terms of the potential chilling of society's notions of free will
- 3) the possible stigmatization effect of such evidence exemplified by past efforts to screen and genetically follow targeted children or corral through preventative detention those individuals deemed genetically predisposed to violence
- Eugenics
- Racist



DOUBLE-EDGED SWORD

- Used to identify individuals for preventative detention
- Used by the prosecution as aggravating factors and predictions of future dangerousness
- Or
- Used by the defence as mitigation of moral blameworthiness



1994-2011

- Professor Denno studied 81 cases commencing with Mobley (three separate publications)
- Initially, behavioural genetic evidence rarely utilized and seldom admitted as evidence
- Almost exclusively in death penalty cases
- Between 2007-2011 a marked change in utilization
- Now often used – again almost exclusively in death penalty cases and sentencing cases



- Literature is quite overwhelming that there is no “crime gene” that will inevitably cause someone to commit a crime
- There are people who are predisposed to commit crimes because of their genetics, but there is also a close association with environmental factors such as child abuse and other non-genetic factors
- In other words, genes influence behaviour but they do not govern or determine it (Denno #3 at 971)



- Bradley Waldroup – killed wife's friend and attempted to kill his wife (2006)
- Evidence tendered that he had the MAO-A deficiency and suffered severe child abuse
- Successful in that the jury did not impose the death penalty (2011)



- Susan Smith – killed her two children but jumped out of the car and saved herself
- Avoided the death penalty
- Evidence was called regarding a family history of depression and mental illness
- 10/33 cases between 2007-11 had the death sentence reversed on appeal



- Not once between 2007-2011 did the prosecution attempt to lead behavioural genetic evidence as an aggravating factor and to predict future dangerousness



TYPES OF CONDITIONS

- Alcohol or substance dependency
- Mental illness
- Depression
- Mental retardation (cannot execute someone who is classified as mentally retarded)
- Bipolar disorder
- Schizophrenia
- Predisposition to violence or criminal behaviour
- Sexual sadism
- Overwhelmingly – family history of alcoholism



AS A DEFENCE TO GUILT – PROF MORSE

- Genetic research can tell us who might commit offences, not whether a person committed the offence because of his or her genetic disposition
- Morse points out that having the MAO-A deficiency with a history of child abuse causally links the risk of criminal and antisocial behaviour nine-fold, but it does not mean that a specific accused did not have the required mental state to commit the offence
- If the “gene produced some uncontrollable internal desire then mitigation or excuse might be desirable



- Do not think there are any cases where behavioural genetics has resulted in an acquittal
- Now many cases in the US where the evidence has been admitted on sentencing cases as mitigation
- Canada – not aware of any reported case where behavioural genetics has been used...won't be long



- Where do we go from here – it will depend on the science

