Penn Fellowships in Neuroscience & Society



Neurolaw Afternoon

Neuroscience and responsibility

- Set aside metaphysical challenge from determinism
- Neuro is relevant as handmaiden to (folk) psychology
 - What kind of psychological information is relevant?

Mens rea

Actus non facit reum nisi mens sit rea.

The act does not make a person guilty unless the mind be also guilty.

Levels of culpability

- Depend on mens rea
- Eg first degree murder requires premeditation; second degree (lower level of culpability) does not.



"If a madman or a natural fool, or a lunatic in the time of his lunacy do [kill a man], this is no felonious act for they cannot be said to have any understanding will." (England, 1581)



The M'Naughten rule, 1843



...at the time of the committing of the act, the party accused was labouring under such a defect of reason, from disease of the mind, as not to know the nature and quality of the act he was doing; or, if he did know it, that he did not know he was doing what was wrong.

In some jurisdictions, "irresistible impulse" also counts.

The Durham rule (1954):

a defendant cannot be found criminally responsible "if his unlawful act was the product of mental disease or mental defect."

Then came Hinckley:







Backlash against allowing "pampered criminals" to "kill with impunity" (in Dan Quayle's words)

Mental illness must be severe; many new procedural hurdles; 3 states abolish insanity defense.

- Q. Where does neuroscience fit in?
- A. As evidence of a defendant's mental status* eg:

CAT scan of Hinckley's brain PET scan of Weinstein's brain

*ie as "handmaiden to psychology"

Two phases of a criminal trial

- Guilt
- Penalty
 - Legally, more room for psychology and neuroscience in sentencing phase

Mitigation at sentencing

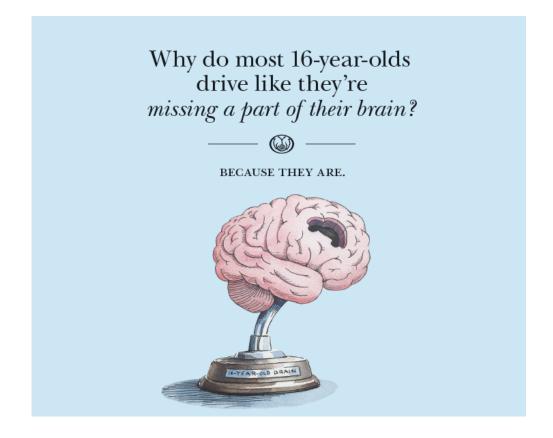
Even if a brain abnormality does not lead to acquittal by reason of insanity, it can lessen the punishment.

Excuses: Immaturity



- Babies get a free pass
- What about children? Teens?

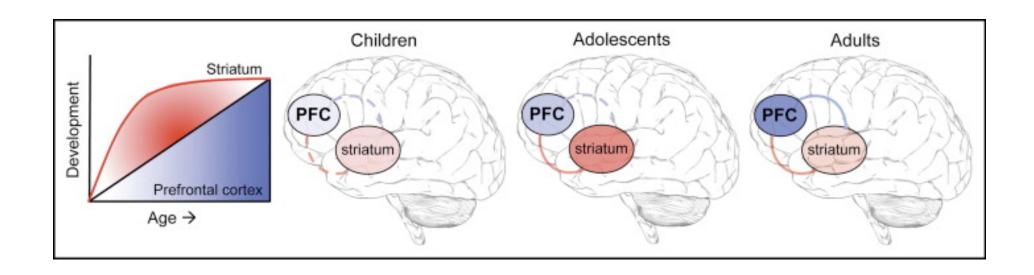
Adolescent brain development



Allstate Insurance advertisement

Adolescent brain development

Dual systems explanation



Lawrence Steinberg, BJ Casey

Excuses: Immaturity

- Roper v. Simmons 2005 Supreme Court ruling on death penalty for juveniles
 - APA and other orgs filed amicus briefs referring to neuroscience evidence on immature PFC
 - Court rules death penalty unconstitutional but does not cite neuro evidence

Excuses: Immaturity

- Graham v. Florida 2010 Supreme Court ruling on life imprisonment for juveniles
 - Extends Roper beyond death penalty
 - Neuro is cited:

"As petitioners amici point out, developments in psychology and brain science continue to show fundamental differences between juvenile and adult minds. For example, parts of the brain involved in behavior control continue to mature through late adolescence. ...

Juveniles are more capable of change than are adults, and their actions are less likely to be evidence of irretrievably depraved character than are the actions of adults."

In conclusion

- Neuroscience intersects with law in multiple ways – all of which are practical, not philosophical
- Mens rea, excuses, mitigation at sentencing
- More ways to come in part 3!