

The Judicial/Science Disconnect

Two general principles

- **Principle I: Admission of forensic evidence that is scientifically unsound**
 - In criminal trials -
 - Notwithstanding Rule 702 of the Federal Rules of Evidence
 - Notwithstanding the Supreme Court's decision in Daubert
- **Principle II: Problems exacerbated at sentencing**
 - The Federal Rules of Evidence do not apply
 - The Daubert decision does not apply
 - “second string factfinding process” as Justice Scalia described it

Principle One: Admitting evidence that is scientifically unsound in trials

- NAS REPORT: Courts have been “utterly ineffective” in assessing the research basis for forensic science.
- “Ostrich” approach: Pretend there is no problem, pretend that the academic and NAS critique did not happen; ignore the implications for the defendant’s liberty of uncritical admission of forensic evidence (Jennifer Mnookin, 2010)
- PCAST Report and Judicial Reaction

Vicious Cycle for Admission of Scientifically Unsound Evidence

- Pedigree of trace evidence – fact it has been admitted without objection for decades – creates a disincentive to challenge it.
- If the lawyers *do not tee up the issue* – admitted without objection
- If the lawyers *do tee up the issue*- a busy trial judge will admit it, counting on that pedigree and that precedent.
- Likely to be affirmed on an abuse of discretion standard
 - While no-abuse-of-discretion finding simply means there is a range of acceptable decisions – admissibility to exclusion – it is interpreted otherwise
- So why bother to raise it?

A problem of Advocacy – Example: *United States v. Pena*

- Counsel files a last minute motion to exclude fingerprint (felon in possession case); fingerprint the ONLY evidence in felon in possession
 - Day before trial is to begin
 - One page
 - Citing student note on fingerprints; no cases
- Judge schedules a hearing following jury selection but before openings

- At the start of the hearing, counsel admits he has no witnesses, no expert
 - The motion had only been made “for the record”
 - Then he added, “Well, with all due respect judge, I appreciate that the Court gave me more credit than I deserve.”

The Court – slow to anger, infinitely patient...

- Outlines the nature of the criticism of fingerprint testimony, with citations to the cases.
- Outlines how seriously it takes these cases, citing to United States v. Hines (handwriting, eyewitness identification) and United States v. Green (ballistics).
- Invited counsel to challenge the evidence; government's witnesses present.
 - ***No judge, I'm good***, he says.

A Problem of Appellate Review

- *Court affirms the trial court in its decision **TO NOT HOLD A HEARING***
- *DAUBERT HEARINGS, THE COURT REASONED, COULD BE RESTRICTED TO **NOVEL CHALLENGES***
 - “The district court did not abuse its discretion by limiting in a proper case the scope of the Daubert hearing to novel challenges to the admissibility of latent fingerprint identification evidence or even dispensing with the hearing altogether if no novel challenge was raised.”

- ***BUT TRIAL COURT DID NOT MAKE A DECISION TO NOT HOLD A HEARING***
- ***BUT THE TRIAL COURT NEVER SAID IT WAS RESTRICTED TO NOVEL CHALLENGES – RATHER TAKING SERIOUSLY ALL CHALLENGES***

- ***WORSE YET, THE APPELLATE COURT MADE SUBSTANTIVE FINDINGS ABOUT THE LEGITIMACY OF FINGERPRINTS***
 - *ACE-V METHOD ENTIRELY APPROPRIATE*
 - *WHAT IT IS*
 - *CASES AFFIRMING IT*
 - *NOTHING IN THE RECORD*
 - *CASES THAT DID NOT EXAMINE THE ISSUE*

The Cognitive Biases of Courts

- **Asymmetric decisionmaking**
 - “Loser’s Rules” phenomenon (in discrimination cases) and its criminal analog
 - If judge excludes the testimony and defendant acquitted, no appeal
 - If judge excludes and defendant convicted; likely not an issue on appeal
 - Only if the judge admits, and defendant is convicted will this be reviewed on appeal.
 - A body of law evolves justifying admission in case after case
 - Precedent notwithstanding the challenges.

- **Precedent and “acceptance in the field”**
- **Precedent and abuse of discretion**
- **New science v. old science distinction**
 - **Early cases on DNA v. trace evidence**
 - **Eyewitness identification vs. handwriting**
 - **Polygraph v. Neuro Lie Detection**

Anchoring effects: heavy reliance on initial information or impressions, especially numerical but can be word associations

Availability heuristic: the tendency to rely on information that readily comes to mind; insufficient attention to future implications of decisions in different contexts

Knowing-doing gap – difficulty of organizations self correcting – judicial education

Status quo bias – aka precedent

- **Kahneman application**

- **System 1:** drives the brains first response; quick, automatic, intuitive, mostly unconscious associative response to stimuli
- Influenced by bias and mistake
- Decisionmaking *during* trials, bail decisions
- **System 2:** slow, deliberate, conscious, calculating, analytical, laborious and apparently rational
- Decisionmaking pre-trial

Dealing with Advocacy: Procedural Order

- There after the trial judge issued an order in every criminal case, providing that in the wake of the NAS report, admissibility of trace evidence “ought not to be presumed; that it has to be carefully considered in each case, and tested in the light of the NAS concerns, the concerns of Daubert/Kumho case law, and Rule 702 of the Federal Rules of Evidence,” and described the procedures governing such a challenge. D.J. Nancy Gertner, Procedural Order: Trace Evidence: March 8, 2010 (Case 1:08-cr-10104-NG).
 - A great deal of publicity
 - ***But not replicated***

Unique Issues of Neurolaw

- Questions about the science
 - Although its scientific pedigree more established
- Questions about relevance
 - Normative concepts in the criminal law
 - Character evidence
 - Provocation
 - Mens rea
 - Self defense
 - Normative judgments about addiction and alcoholism
 - Impact of toxic stress
 - Complexity of post hoc reconstruction

Principle Two: Problems exacerbated at Sentencing

- **The context in which neuroscience will be admitted** – sentencing not trials, the territory of “good enough” evidence

- Resource problems: CJA/Private counsel
 - Civil/criminal problem
- Redefining ineffective assistance of counsel
- Problems of discovery

Sentencing Context

- Trial
 - Evidentiary rules – no hearsay or character
 - Application of Daubert
 - Strict rules of relevance
 - Concern about causation
 - Beyond a reasonable doubt
- Sentencing – “good enough” evidence
 - Limited evidentiary rules –hearsay/character admissible
 - Daubert does not apply –junk science = junk evidence
 - Virtual no limits on the evidence a judge can consider
 - No concern about causation – only impairment
 - Fair preponderance of the evidence
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- Sentencing Commission trains new federal judges
 - That the standard of proof for determining a fact is preponderance of the evidence
 - **That the rules of evidence do not apply**
 - **That the Daubert decision does not apply**
 - **That the standard for consideration of evidence at sentencing is..."relevant information must have sufficient indicia of reliability to support probable accuracy.**

Uniquely relevant

- Evidence that may not be relevant to culpability may be relevant to sentencing/ rehabilitation.
 - Controversies with respect to evidence of addiction
 - May not be relevant to substantive defenses
 - insanity and diminished capacity
 - Toxic stress and addiction

- Problems of G2i- generalizations about culpability, about risk assessment, about deterrence
- Prediction – taking into account societal intervention
- Problems of Mitigation v. Aggravation factors
 - Different legal protections
 - Different rationale
- Constitutional Issues with Access to Defendant

Errors subject to perfunctory review --Abuse of Discretion-

- “No conscientious judge, acting intelligently, could honestly have taken the view expressed by [the trial judge].”
 - Commonwealth v. Druce, 453 Mass. 686, 701 (2009).
- Judge must be a laggard, dumb, and dishonest!

Special problems of sentencing

- **Abuse of Discretion – on appeal**
- Habit of excusing error – harmless error – makes it difficult to identify it
- Envisioning error – the limited experience of appellate judges
- No accountability: SC rarely grants cert
- Finality vs. Truth
 - S.Ct. yesterday denied certiorari in *Wessinger v. Vannoy* – capital case in which evidence of major neurocognitive disorder was never presented.

- And even if neuroscience could individualize .. in liability determinations, in sentencing
 - Issues of autonomy
 - Greenberg, “Rehabilitation is Still Punishment” (1972)
 - “The desire to help, when coupled with the desire to control, is totalitarianism.”