ADMISSIBILITY OF TRACE EVIDENCE: A WHOLELISTIC APPROACH--DESPITE DAUBERT

Kenneth E. Melson
ADMISSIBILITY OF EXPERT OPINIONS IN TRACE EVIDENCE

TWO LEADING JUDICIAL TESTS:

1) FRYE

GENERAL ACCEPTANCE
COUNTING SCIENTIFIC NOSES
ADMISSIBILITY OF EXPERT OPINIONS

2) DAUBERT

--VALIDITY AND RELIABILITY

--COURT DETERMINES VALIDITY AND RELIABILITY, PLUS RELEVANCY
ADMISSIBILITY OF EXPERT OPINIONS IN TRACE EVIDENCE

DAUBERT:
--REQUIRED TEST IN FEDERAL COURT
--REPLACES FRYE IN SOME STATES

ADMISSIBILITY OF EXPERT OPINIONS IN TRACE EVIDENCE

DAUBERT FACTORS:
1. TESTABLE HYPOTHESIS
2. SUBJECTED TO PEER REVIEW AND PUBLICATION
3. KNOWN OR POTENTIAL ERROR RATE
ADMISSIBILITY OF EXPERT OPINIONS IN TRACE EVIDENCE

DAUBERT FACTORS:

3.5 MAINTENANCE OF STANDARDS CONTROLLING THE TESTING

4. GENERALLY ACCEPTED WITHIN THE SCIENTIFIC COMMUNITY
DAUBERT'S LEGACY??
ADMISSIBILITY OF EXPERT OPINIONS IN TRACE EVIDENCE

DAUBERT:
--NOT A NEW APPROACH IN FEDERAL COURT; CONSISTENT WITH FED. RULE EVID. APPROACH
--EVIDENCE MUST BE RELEVANT AND PROBATIVE, AND OUTWEIGH PREJUDICIAL IMPACT
ADMISSIBILITY OF EXPERT OPINIONS IN TRACE EVIDENCE

CLARIFICATION: DOES DAUBERT ONLY APPLY TO SCIENTIFIC DISCIPLINES?

ANSWER: *KUMHO TIRE COMPANY*
ADMISSIBILITY OF EXPERT OPINIONS

KUMHO TIRE COMPANY:

DAUBERT FACTORS ALSO APPLY TO:

“TECHNICAL AND OTHER SPECIALIZED KNOWLEDGE”
ADMISSIBILITY OF EXPERT OPINIONS

KUMHO TIRE COMPANY:

--DAUBERT FACTORS ARE NOT A "DEFINITIVE CHECK LIST"
(Do not all necessarily apply even in every instance of scientific testimony)

--THE INQUIRY IS A FLEXIBLE ONE
ADMISSIBILITY OF EXPERT OPINIONS IN TRACE EVIDENCE

--MORE DIFFICULT FOR LAWYERS AND JUDGES

--REQUIRES SCIENTISTS TO BE EDUCATORS

--THEREBY FORCES SCIENTISTS TO VALIDATE UNDERLYING SCIENCE AND PROCEDURE
ADMISSIBILITY OF EXPERT OPINIONS IN TRACE EVIDENCE

RULE 702:

1. TESTIMONY IS BASED ON SUFFICIENT FACTS AND DATA

1. TESTIMONY IS PRODUCT OF RELIABLE PRINCIPLES AND METHODS
ADMISSIBILITY OF EXPERT OPINIONS IN TRACE EVIDENCE

RULE 702:

1. WITNESS HAS APPLIED THE PRINCIPLES AND METHODS RELIABLY TO THE FACTS OF THE CASE
ADMISSIBILITY OF EXPERT OPINIONS IN TRACE EVIDENCE

TRACE EVIDENCE
--Fire Debris; GSR; Hair, Fiber, Glass; Explosives (as listed by ASCLD/LAB)
VULNERABILITY TO ATTACK FOR DAUBERT CRITERIA 1 & 3*

CRITERION 1: TESTABLE HYPOTHESIS (validity)
CRITERION 3: ERROR RATE (reliability)

VULNERABILITY TO ATTACK FOR DAUBERT CRITERIA 1 & 3

GLASS: MODERATELY HIGH
HAIR: HIGH
FIBER: MODERATELY HIGH
SOIL: MODERATELY HIGH
FIRE DEBRIS: MODERATELY LOW

*Faigman, supra.
ADMISSIBILITY OF EXPERT OPINIONS IN TRACE EVIDENCE

ERROR RATE:

LABORATORY ACCREDITATION
TECHNICAL REVIEWS
CASE FILES
QUALITY MANAGER AND MANUAL TESTING PROTOCOLS
PROFICIENCY TESTING
QUALITY OF SCIENTIFIC EXAMINATIONS

LABORATORY ACCREDITATION

FORENSIC SCIENCE LABORATORIES

QUALITY MANAGEMENT PROGRAMS

PROPER APPLICATION OF TECHNIQUE
ADMISSIBILITY OF EXPERT OPINIONS IN TRACE EVIDENCE

ERROR RATE:
VERIFICATION CERTIFICATION PROFESSIONAL RESPONSIBILITY (ETHICS) TRAINING

ETHICS
ADMISSIBILITY OF EXPERT OPINIONS IN TRACE EVIDENCE

EXISTENCE AND MAINTENANCE OF STANDARDS CONTROLLING THE TESTING (DAUBERT)

WITNESS HAS APPLIED THE PRINCIPLES AND METHODS RELIABLY TO THE FACTS OF THE CASE (FRE 702)
NEW HAMPSHIRE v. LANGILL (2007)

Witness violated lab’s own operating procedures by not taking contemporaneous bench notes
NEW HAMPSHIRE v. LANGILL (2007)

Verification process was not blind and therefore subject to “confirmation bias” (not part of manual)
Might other courts consider “context effect” in determining reliability?
ADMISSIBILITY OF EXPERT OPINIONS IN TRACE EVIDENCE

WHAT MIGHT TRIGGER ADAUBERT HEARING?

--Complexity of scientific evidence
--Uniqueness of scientific evidence
--Extent of individualization
--Significance of evidence to case
--Need for discovery
--Consumption of evidence
ADMISSIBILITY OF EXPERT OPINIONS IN TRACE EVIDENCE

AT WHAT POINT MIGHT A DAUBERT HEARING BE HELD?

--Pre-trial
--During trial
(voir dire)

Daubert Kit
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