EXPERT SCIENTIFIC/TECHNICAL TESTIMONY IN CRIMINAL CASES

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MRE 702. TESTIMONY BY EXPERTS

If the court determines that scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education may testify thereto in the form of an opinion or otherwise if (1) the testimony is based on sufficient facts or data, (2) the testimony is the product of reliable principles and methods, and (3) the witness has applied the principles and methods reliably to the facts of the case.

I. THE FORMER TEST FOR ACCEPTANCE OF SCIENTIFIC TESTIMONY

A. The principles must have "general reliably and acceptability."

People v Davis, 343 Mich 348 (1955). The "Davis -Frye" rule, rejecting polygraph evidence in this case..

Frye v United States, 293 F 1013 (DC Cir, 1923). The "general acceptance test."

II. THE REVOLUTION IN THE STANDARDS FOR ADMISSIBILITY

A**.** *Daubert v Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579; 113 S Court 2786; 125 L Ed2d 469 (1993).

The trial court had excluded scientific expert opinion testimony under the "general acceptance" test. The supreme court reversed and remanded for a determination under FRE 702 and posited a nonexhaustive list of considerations required under the rule, .i.e whether the theory or technique.

1. Can be and has been tested.
2. Has been subject to peer review and publication.
3. Has a known or potential rate of error.
4. Has been generally accepted.

B. *Kumho Tire Co. v Carmichael,* 526 US 137; 119 S Court 1167; 143 L Ed2d 238 (1999). The *Daubert* principles apply to expert non-scientific evidence as well.

C. Selected Cases Applying the *Daubert* Principles.

1. *Gilbert v Daimler Chrysler Corp*, 470 Mich 749 (2004).

Under MRE 702 the courts gatekeeper role applies to all stages of expert analysis. The inquiry examines not only the data underlying expert testimony, but also the manner in which the expert interprets and extrapolates from that data, and particularly when the expert provides testimony about causation. (Reversing a plaintiff's verdict where the expert testified that sex harassment had produced a permanent change in plaintiff's brain chemistry, and predicting her to die the most painful death imaginable.)

2. *Nelson v American Sterilizer* (on remand), 223 Mich App 485 (1997).

The court upheld the trial court's exclusion of an opinion of an expert opinion
that exposure ethylene oxide causes liver disease.

3. *Anton v State Farm Mutual Auto Insurance Company*, 238 Mich App 673 (1999).

Citing the *Nelson* case, the court approved the admission of expert opinion attributing plaintiff's Graves' disease to an automobile accident.

4. *Chapin v A & L Parts, Inc.*, 274 Mich App 122 (2007).

The court, with a dissent, approved testimony that the employee's exposure to automobile brake dust caused his mesothelioma. The opinion said that

> "[T]he trial court's role as gatekeeper does not require it to search for absolute truth, to admit only uncontested evidence, or to resolve genuine scientific disputes. The facts that an opinion held by a properly qualified expert is not shared by all others in the field or that there exists some conflicting evidence supporting and opposing opinion do not necessarily render the opinion 'unreliable.'"

III.. Expert Testimony Concerning Specific Issues in Criminal Cases

A. DNA Evidence

People v Coy, 243 Mich App 283 (2000). Evidence of DNA match is admissible only if accompanied by statistical analysis concerning

the likelihood or significance of such a match.

B. Child Sexual Abuse Syndrome

People v Beckley, 434 Mich 691 (1990). If qualified, an expert may give evidence of behavior of sexually abused children for the narrow purpose of rebutting an inference that a complainant's postincident behavioral was inconsistent with that of an actual victim of sexual abuse, incest or rape. (The issue is not governed by the *Davis/Fyre* test.) But the expert may not testify about the truthfulness of the complainant's allegations against the defendant. "Psychologists and psychiatrists are not, and do not claim to be, experts at discerning truth. Psychiatrists are trained to accept facts provided by their patients, not to act as judges of patients credibility. (p. 728, citing other authorities)

People v Peterson, 450 Mich 349 (1995). Unless a defendant raises the issue of the child victims postincident behavior or attacks the child's credibility, an expert may not testify that the particular complainant's behavior is consistent with that of a sexually abused child.

C. Battered Spouse Syndrome

People v Wilson, 194 Mich App 599 (1992). A court may allow the introduction of expert regarding a description of the general syndrome and that certain behavior of the defendant already in evidence is characteristic of battered spouse victims generally. The expert may not testify that the allegations of battery are truthful, nor whether the defendant suffers from the syndrome, nor whether the defendant's act was the result of the syndrome.

D. Eyewitness Identification Testimony

People v Hill, 84 Mich App 90 (1978). Affirmed the trial court's decision not to admit expert testimony on the process by which people perceive and remember events on the basis that the subject was within the experience of lay persons, noting also that expert testimony on the issue has been excluded historically, unless the witness suffered from physical or mental disorders, or delusions.

Similarly, *People v Hampton*, (CA No. 268812, August 2, 2007); *People v Webb, (*CA No. 253605, December 13, 2005*).*

E. Sexual Assault Experts

People v Smith & *Mays*, 425 Mich 98 (1986) . Opinion testimony of examining medical expert that complainant had been sexually assaulted was reversible error for being based solely on the emotional state of and history given by the complainant. But in *Mays*, no error in admitting testimony of examining physician that the complainant had been penetrated against her will when the opinion included observations of abrasions and other physical findings.

People v Dobek, 274 Mich App 58 (2007). Testimony of psychologist, based on tests, that defendant did not fit the profile of a typical sex offender, properly excluded by trial court under MRE 702.

F. Drug Trafficking Testimony

People v Ray, 191 Mich App 706 (1991). A police officer qualified as an expert by experience with drug trafficking properly opined that the quantity of defendant's cocaine, the fact that the rocks were evenly cut, and the selling price of cocaine on the street clearly indicated that defendant intended to sell the drugs and not simply use them for personal consumption.

People v Williams, (after remand), 198 Mich App 537 (1993). The officer (the same one as in the *Ray* case) was allowed to testify how materials found in defendant's house was routinely used to cut, weigh, package, and sell controlled substances. "There is also no serious question that drug-related law enforcement is a recognized area of expertise." (p. 542)

People v Hubbard, 209 Mich App 234 (1995). Following a majority of federal circuits, the court rules that use of "drug dealer" profile evidence as substantive evidence of a defendant's guilt is reversible error.

People v Murray, 234 Mich App 46 (1999). As in *Hubbard*, drug profiling evidence cannot be used as substantive evidence. Here, however, the use of drug profile evidence was appropriate because it was merely used "as general education for the jury to explain the drug trade." (p. 60) The court properly instructed the jury, unlike *Hubbard*, that the expert testimony was not to be used to decide whether any crime was committed, but was for informational purposes and nothing else.

People v Williams, 240 Mich App 316 (2000). The opinion recapitulates the four-part test from *Murray* when considering admissibility of drug profile evidence:

1. The evidence must be offered as background modus operandi and not as substantive evidence of guilt.

2. Something more than drug profile evidence must be admitted to prove guilt.

3. The jury must be instructed that drug profile evidence is proper only as background or modus operandi evidence and not as substantive evidence of guilt.

4. T he expert witness cannot express an opinion that, on the basis of the profile, the defendant is guilty.

Here, error was committed (though harmless error) for allowing the witness to express the belief that defendant used the house as a safe house.

G. Tracking Dog Testimony

People v Harper, 43 Mich App 500 (1972). Prerequisite showings for admissibility of tracking dog evidence.

1. The handler was qualified to use the dog.
2. The dog was trained and accurate in tracking humans.
3. The dog was placed on the trail where circumstances indicate the defendant had been present, and
4. The trail had not become so stale or contaminated as to be beyond the dog's competency to follow it.

But tracking dog evidence alone is insufficient to support a conviction. *People v McPherson,* 84 Mich App 341 (1978 *); People v Perryman,* 89 Mich App 516 (1979)**.**

H. Hypnosis, Truth Serum and Polygraph Evidence

Not reliable. *People v Lee*, 434 Mich 59 (1988) (Hypnosis). *People v Cox*, 85 Mich App 314 (1978). (Truth Serum). *People v Rogers* 40 Mich App 576 (1985). (Polygraph)

MRE 703. BASES OF OPINION TESTIMONY BY EXPERTS

The facts or data in the particular case upon which an expert bases an opinion or inference shall be in evidence. This rule does not restrict the discretion of the court to receive expert opinion testimony subject to the condition that the factual bases of the opinion be admitted in evidence thereafter.

I. How Did We Get Here? - The History of Rule 703.

A. The Common Law Rule.

Prerequisites for expert testimony:

"1. There must be an expert.

* * *

2. There must be facts in evidence which require or are subject to examination and analysis by a competent expert.

* * *

3. Finally, there must be knowledge in a particular area that belongs more to an expert than to the common man."

O'Dowd v Linehan, 385 Mich 491, 509-510 (1971).

B. Reasons for the Rule.

1. Expert opinion is irrelevant if the facts on which it is based do not exist.

2. The fact-finder must be able to resolve the underlying disputed facts in order to decide whether the expert opinion is valid.

C. The Inconvenience of the Original Rule.

D. The Federal Innovation.

1. Original FRE 703.

Rule 703. Bases of Opinion Testimony by Experts

The facts or data in the particular case upon which an expert bases an opinion or inference may be those perceived by or made known to the expert at or before the hearing. If a type reasonably relied upon by experts in the particular field in forming opinions or inferences

upon the subject, the facts or data need not be admissible in evidence.

2. The rationale of FRE 703.

"...[T]he rule is designed to broaden the basis for expert opinions beyond that current in many jurisdictions and to bring the judicial practice into line with the practice of the experts themselves when not in court. Thus a physician in his own practice bases his diagnosis on information from numerous and of considerable variety, including statements by patients and relatives, reports and opinions from nurses, technicians and other doctors, hospital records, and X-rays. Most of them are admissible in evidence, but only with the expenditure of substantial time in producing and examining various authenticating witnesses. The physician makes life-and-death decisions in reliance upon them. His validation, expertly performed and subject to cross-examination, ought to suffice for judicial purposes." Federal Advisory Committee Note to FRE 703.

E. The Abuses of the Rule.

1. Federal Cases

United States v Ramos, 725 F2d 1322 (CA 11, 1984)

In a charge of making a false statement in an application for a passport, a "Miami fraud examiner" testifies about conversations with New York authorities about the authenticity of the records.

United States v Affleck, 776 F2d 1451 (CA 10, 1985)

In a charge of securities fraud, the accountant who gives opinion that the defendant made misrepresentations testifies to his conversations with former accountants and employees of the defendant.

United States v Rollins, 862 F2d 1282 (CA 7, 1988)

In a narcotics prosecution, FBI agent testifies to an informant's statement that "T-shirts" means cocaine, in support of the agent's opinion that "T-shirts" means cocaine.

2. The Dead Giveaway:

Federal Trial Evidence (James Publishing Co., 1992, p. 129):

> "Remember, a witness testifying as an expert under this rule may rely upon matters in the formulation and presentation of his opinions which are not admissible themselves, but which are also the type of information upon which experts normally rely in their field of expertise. As a result, when you are dealing with evidence that is not otherwise admissible, consider whether by giving it to your expert you will be able to have it presented to the jury through his opinions."

3. The Michigan Experience.

a. The Michigan adaptation of Rule 703.

> **Rule 703. Bases of Opinion Testimony by Experts**
>
> The facts or data in the particular case upon which an expert bases an opinion or inference may be those perceived by or made known to the expert at or before the hearing. The court may require that underlying facts or data essential to an opinion or inference be in evidence.

b. Reasons for the Michigan version.

c. The subsequent practice in Michigan.

1. The hearsay rule was nonexistent.
2. There is a proliferation of experts and their expense.
3. The fundamental character of the trial is altered.

d.. *People v Anderson*, 166 Mich App 455 (1988). Under MRE 703, an expert may base an opinion on findings and opinions of other experts. Accord, *People v Caulley*, 197 Mich App 177 (1992).

F. **The Federal Remedy -**

1. Amended FRE 703 - Effective December 1, 2000

Rule 703. Bases of Opinion Testimony by Experts

The facts or data in the particular case upon which an expert bases an opinion or inference may be those perceived by or made known to the expert at or before the hearing. If a type reasonably relied upon by experts in the particular field in forming opinions or inferences upon the subject, the facts or data need not be admissible in evidence IN ORDER FOR THE OPINION OR INFERENCE TO BE ADMITTED. IF THE FACTS OR DATA ARE OTHERWISE INADMISSIBLE, THEY SHALL NOT BE DISCLOSED TO THE JURY BY THE PROPONENT OF THE OPINION OR INFERENCE UNLESS THEIR PROBATIVE VALUE SUBSTANTIALLY OUTWEIGHS THEIR PREJUDICIAL EFFECT.

2. The limiting instruction?

"When information is reasonably relied upon by an expert and yet is admissible only for the purpose of assisting the jury in evaluating an expert's opinion, a trial court applying this Rule must consider the information's probative value in assisting the jury to weigh the expert's opinion on the one hand, and the risk of prejudice resulting from the jury's potential misuse of the information for substantive purposes on the other. The information may be disclosed to the jury, upon objection, only if the trial court finds that the probative value of the information in assisting the jury to evaluate the expert's opinion substantially outweighs its prejudicial effect. If the otherwise inadmissible information is admitted under this balancing test, the trial judge must give a limiting instruction upon request, informing the jury that the underlying information must not be used for substantive purposes. *See* Rule 105. In determining the appropriate course, the trial court should consider the probable effectiveness or lack of effectiveness of a limiting instruction under the particular circumstances." Federal Advisory Committee Report, p. 91.

3. The last resort - "Removing the Sting"

"[I]n some circumstances the proponent might wish to disclose information that is relied upon by the expert in order to 'remove the sting' from the opponent's anticipated attack, and thereby prevent the jury from drawing an unfair negative inference. The trial court should take this consideration into account in applying the balancing test provided by this amendment. " Federal Advisory Committee Report, p.

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II. The Michigan Amendment

A. The amended rule - Effective September 1, 2003

Rule 703 Bases of Opinion Testimony by Experts

The facts or data in the particular case upon which an expert bases an opinion or inference ~~may be those perceived by or made known to the expert at or before the hearing~~ shall be in evidence. ~~The court may require that underlying facts or data essential to an opinion or inference be in evidence.~~ This rule does not restrict the discretion of the court to receive expert opinion testimony subject to the condition that the factual bases of the opinion be admitted in evidence thereafter.

B. Both sentences of the amended rule are arguably redundant.

1. The first sentence of the rule merely restates the common law.

2. The second sentence of the rule mirrors MRE 104(B):

Rule 104 Preliminary Questions

* * *

(B) *Relevancy conditioned on fact*. When the relevancy of evidence depends upon the fulfillment of a condition of fact, the court shall admit it upon, or subject to, the introduction of evidence sufficient to support a finding of the fulfillment of the condition.

C. Concurrently enacted amendments to MRE 1101:

Rule 1101 Applicability

(a) [Unchanged.]

(b) *Rules inapplicable*. The rules other than those with respect to privileges do not apply in the following situations and proceedings:

(1) - (8) [Unchanged.]

(9) *Domestic Relations Matters*. The court's consideration of a report or recommendation submitted by the friend of the court pursuant to MCL 552.505(1)(g) or (h).

(10) *Mental Health Hearings.* In hearings under Chapters 4, 4A, 5, and 6 of the Mental Health Code, MCL 330.1400 *et seq.*, the court may consider hearsay data that are part of the basis for the opinion presented by a testifying mental health expert.

D. Other areas where amended Rule 703 should not be applicable.

1. Testimony Regarding Sanity in Criminal Cases

MCL 768.20a(6) (Contents of report of state psychiatrist examiner in insanity defense cases.)

People v Dobben, 440 Mich 679; 488 NW2d 726 (1992)
People v Pickens, 446 Mich 298; 521 NW2d 797 (1994)
People v Webb, 458 Mich 265; 580 NW2d 884 (1998)

2. Expert real estate appraisers

Independent proof of comparables should not be required:

Excerpt from August 21, 2001 memorandum to the Michigan Supreme Court from William J. Giovan, Chair of the Advisory Committee of Rules of Evidence, regarding comments from professional organizations on proposed MRE 703 amendments:

"The newly-added objections are vague, and it is difficult to respond where there no specifics. If the Family Law Section is saying that experts hired by litigants will no longer be able to render opinions based on hearsay, that is what the amendment to Rule 703 is supposed to accomplish.

I do know, however, that the July 26 letter is wrong about at least one of the categories of experts named, i.e., property appraisers. I presided over a number of condemnation trials before the advent of MRE 703, and in all cases the appraisers on both sides testified about comparable sales without any hearsay objection. While no one can exclude the possibility that some condemnation lawyer will some day interpose a hearsay objection if the rule is amended, the report of the Advisory Committee makes it clear that the intent of the amendment to Rule 703 is to return the state of the law to what it was prior to the enactment of MRE 703 and not to invent new impediments to the reception of expert opinion. In the nearly impossible likelihood that

the condemnation bar would alter the practice after the amendment of Rule 703, the very worst that would occur is that the comparable sales would be proven by public records. But it is not going to happen because appraisers ordinarily testify about the same sales, the argument usually being about whether they are true comparables." (Pp 5-6).

E. What is NOT required by MRE 703 - Establishing the expert's credentials or expertise by nonhearsay, the qualification of an expert being governed by MRE 702.

"The facts or data *in the particular case* on which an expert basis an opinion or inference shall be in evidence." MRE 703.

Excerpt from Michigan Advisory Committee Report, August, 2000, p. 12.

"[I]n the same vein, we emphasize that the facts or data that must be in evidence to support an expert opinion are the facts or data 'in the particular case,' as the rule states. As is perhaps obvious, the rule is not intended to require independent proof of the literature, studies, experiments, etc. that qualify a witness as an expert in the first instance."

However, the amended rule will tend to re-define the distinction between MRE 703 and MRE 702, particularly regarding the admissibility of learned treatises:

MRE 707 Use of Learned Treatises for Impeachment

To the extent called to the attention of an expert witness upon cross-examination, statements contained in published treatises, periodicals, or pamphlets on a subject of history, medicine, or other science or art, established as a reliable authority by the testimony or admission of the witness or by other expert testimony or by judicial notice, are admissible for impeachment purposes only. If admitted, the statements may be read into evidence but may not be received as exhibits

F. Applying the amended rule.

1. The cardinal rule - the parties tell the witness the facts, not vice-versa.

2. The return of the hypothetical question.

3. Cross-examination of experts on issues of fact should be limited.

4. The judge does not decide whether the facts are proven, merely whether they are inferable from the evidence.

G. The amended rule will be less onerous than in the practice before 1978

1. Opinions and diagnoses are admissible in the "business record" exception of the hearsay rule. MRE 803(6).

2. Admitting business records as a foundation for expert testimony (or for any other reason) is simplified. MRE 902(11), effective September 1, 2001.

H. The amended MRE 703 may have benefits beyond preserving the rule against hearsay.

> "There has been a veritable explosion in the need and use of professional expert witnesses in the practice of general law during this past century. A technical advisory service for attorneys lists more than 7,800 categories of experts available for litigation purposes."
> Norman N. Robbins, Editorial Comment, p. 2, *Michigan Family Law Journal, "Expert Witnesses"* edition, 2000.

1. The amended rule should decrease the incentive to invent a use for expert witnesses.

2. The time expended for preparing, deposing and examining expert witnesses should be reduced.

I. Criminal cases where the Court of Appeals has ignored the amendment to MRE 703.

People v Lonsby, 268 Mich App 375 (2005):

"It is well-settled that an expert witness may rely on hearsay evidence when the witness formulates an opinion. *People v Caulley*, 197 Mich App 177, 194; 494 NW2d 853 (1992), citing MRE 703." (p. 382-383) (Two judges concurring in result only.)

People v Miller, (CA No. 249412, November 9, 2004):

"It is well established in Michigan that an expert witness may base his or her expert opinion on hearsay or the opinions of other experts." (Slip opinion, p. 4)