DOG SCENT LINEUPS

LEGAL ISSUES IN POST-CONVICTION CHALLENGES

By Andrew Taslitz
Purpose of Today’s Presentation

• I won’t run through every slide in just 30 minutes
• But I will hit the high points, and your copy of the slides will give you the details
• My goal is to show that dog scent lineup evidence is scientific evidence subject to Daubert and related rules; that the failure to recognize and act on that constitutes the effective assistance of counsel; and that the jury impact is likely to be so substantial that a failure to challenge the evidence was prejudicial.
Ineffective Assistance of Counsel: The Most Likely Gateway

• 1\textsuperscript{st} Prong: Was counsel’s performance deficient, that is, did counsel make errors so serious that counsel was not functioning as the “counsel” guaranteed by the Sixth Amendment?

• The proper test is reasonableness under prevailing professional norms

• Thus the first burden here is to show that:
  – Counsel should reasonably be expected to be up on the tools for challenging scientific evidence; and
  – Dog scent lineups are scientific evidence
The Duty to Challenge Scientific Evidence

• Sources of the Duty I:
  – 1. Basic law school Evidence courses now include some instruction in the scientific method.
  – 2. Law schools also routinely offer electives on scientific evidence.
  – 3. There are a vast number of books written for lawyer laypersons on the various scientific techniques and how to challenge them.
  – 4. There are numerous websites offering guidance, and the internet makes research easy.
  – 5. There are ample CLE courses.
The Duty to Challenge Scientific Evidence II

6. The NAS report reinforces the centrality of counsel’s role in challenging scientific evidence.

7. Daubert has for years made some knowledge of science and the scientific method central to evidence practice.

8. Ethics codes and standards recognize the importance of issues affecting innocence, including scientific evidence.
• 1. MRPC 1.1: “A lawyer shall provide competent representation to a client.” Such representation requires the “skill, thoroughness and preparation reasonably necessary for the representation.”
  
  — Comment 5: “Competent handling includes inquiry into and analysis of the factual...elements of the problem, and use of methods and procedures meeting the standards of competent practitioners.”

  — Comment 6: Competence includes the duties to “keep abreast of changes in the law and its practice, including engaging in continuing study and education”
ETHICAL CODES AND STANDARDS II

• MRPC 3.8 (g) imposes a duty on each prosecutor knowing of new, credible, material evidence creating a reasonable likelihood that a convicted defendant did not commit the offense promptly to report the evidence to an appropriate court and, if the conviction occurred in the prosecutor’s jurisdiction, promptly to disclose the evidence to the defense and undertake further investigation or cause it to occur to determine whether the defendant was wrongly convicted.

• Logic and legislative history suggest that this duty includes evidence of seriously flawed scientific evidence offered at trial.

• This suggests a correlative duty on defense counsel to be aware of evidentiary flaws to bring to the state’s attention
ETHICAL CODES AND STANDARDS III

• ABA Standards Relating to the Administration of Criminal Justice (3d ed. 1992), Standard 4-4.4, Relation with Expert Witnesses, demonstrates that considering expert witnesses should be a standard part of trial preparation

• That standard does not mandate retaining an expert but does caution defense counsel who choose to do so to respect the expert’s independence and role in aiding the factfinder
THE NATIONAL ACADEMY OF SCIENCES (NAS) REPORT I

• Title: Strengthening Forensic Science in the United States: A Path Forward (2009)

• Major Relevant Conclusions:
  – Weak forensic science is contributing to wrongful convictions
  – Forensic science programs are not uniform, varying in funding, access to instrumentation, availability of skilled and well-trained personnel, certification, accreditation, and oversight.
  – State and local programs are sorely lacking in money, staff, training, and other resources
• Relevant Conclusions Continued:
  – Operational principles and procedures are not standardized, either within or between jurisdictions.
  – Although the Committee touched on a number of techniques, it did not explicitly address dog scent lineups. But it decided early in its work that it was not feasible to do a detailed analysis of each technique, instead it sought to identify concerns that held, to one degree or another, across techniques.
  – “With the exception of nuclear DNA analysis, however, no forensic method has been rigorously shown to have the capacity to consistently, and with a high degree of certainty, demonstrate a connection between scientific evidence and a specific individual or source.”
Major Relevant Conclusions Continued Further:

- Most forensic disciplines lack an adequate body of peer-reviewed, published articles establishing the scientific bases and validity of the relevant technique.
- And most of the disciplines rely too much on subjective assessments of matching characteristics.
- Indeed, entire disciplines lack a reliable body of scientific knowledge supporting their capacity accurately to analyze evidence and report findings.
• Conclusions Continued:
  – Central to evidentiary admissibility must be the extent to which practitioners rely on human interpretation that could be tainted by error, the threat of bias, or the absence of sound operational procedures and robust performance standards.
  – We will soon see that these interpretive concerns are of major significance with dog scent lineups.
NAS REPORT V: ADVERSARIAL SYSTEM CONCERNS

• 1. Prosecutors are more likely than defense, especially for indigent defendants, to have access to quality experts.

• 2. Courts appear loathe to insist on rigorous, systematic research as a condition for admitting forensic scientific evidence in criminal cases, perhaps because to do so would be to “demand more by way of validation than the disciplines can presently offer”

• 3. Funding for academic forensic science research generally requires law enforcement collaboration, which can inhibit pursuit of the more fundamental scientific questions
NAS REPORT VI: ADVERSARIAL SYSTEM CONCERNS CONTINUED

• 4. Reliance on the “apprentice-type training and a guild-like structure of disciplines” works against a single relevant forensic sciences profession

• 5. The major federal research resources – the NIJ and the FBI – are part of the prosecutorial arm of government and thus “could be subject to subtle contextual biases that should not be allowed to undercut the power of forensic science”

• 6. The best forensic sciences research must be equally available to prosecutors and defense counsel.
NAS REPORT VII: HUMAN OBSERVER BIAS

• Recommendation 5:
  – A newly-formed National Institute of Forensic Science should encourage research programs on human observer bias and sources of human error in forensic examinations.
  – Such programs might include studies to determine whether and to what extent the results of forensic analyses are influenced by knowledge regarding the background of the suspect and the investigator’s theory of the case.
  – Research on human error should be closely linked with research conducted to quantify and characterize the amount of error.

Recommendation 6: Lab accreditation and individual certification should be required.
What if the Standard for Counsel’s Performance Applies Before the NAS, Daubert, Etc.?

• Answer: In the area of dog scent lineups, all these concerns had been raised in forms easily accessible to legal practitioners no later than 1990:

Are Dog Scent Lineups Scientific? I

• Answer: Yes.
• Reasons: 1. Common sense. Results turn on canine biology and human and canine psychology.
• 2. Scientists certainly consider it scientific evidence, as Larry Myers talk has just shown.
• 3. The purpose of special admissibility rules for scientific evidence is to protect the jury from evidence it cannot properly evaluate at all or at least if not properly educated by a qualified expert. But the factors affecting dog scent lineup accuracy are not within common knowledge and often contradict it.
Are Dog Scent Lineups Scientific II?

• 4. The little research done on jury psychology in this area shows that juries overvalue this evidence and don’t appreciate fully its weaknesses, at least if not properly educated.

• 5. Ample anecdotal, cultural criticism related, media studies related evidence shows that most of the public is in the thrall of a myth of dog-scenting infallibility.

• 6. Most of the public is unaware of the important distinction between dog scent detection and discrimination.
Is Dog Scent Lineup Evidence Scientific? III

• Some courts have said that this evidence is non-scientific because it depends on the abilities and training of the individual dog.
• This view is flatly wrong.
• The accuracy of any scientific test depends upon the validity of both the underlying scientific principles and the instrument (method or technique) applying those principles, as well as the calibration and testing of the instrument to ensure that it is in proper working order.
• With scent lineups, dogs are the instrument to be tested.
Daubert and Scent Lineups I

• Daubert Test: The evidence must be shown to be both relevant and reliable.

• Factors whose applicability should at least be considered:
  – Whether a theory or technique can be (and has successfully been) tested;
  – Whether the theory or technique has been subjected to peer review and publication;
  – The known or potential rate of error of a particular scientific technique;
  – The existence and maintenance of standards controlling the technique’s operations;
  – A scientific technique’s acceptance within a relevant scientific community
Daubert and Scent Lineups II

• Daubert applies only to the major premises of an informal syllogism, i.e., to principles and methods, not how they are applied in a particular case, and is codified at FRE 702(2)

• Major Premises:
  – Principle: Each human has a unique scent
  – Method: Properly trained dogs, under proper conditions, can identify this unique scent of a specific individual and match it to another source containing his or her unique scent.
The Uniqueness of Human Scent

• Many researchers would probably say yes, but the number of studies is actually quite limited, and their meaning is debatable. Genetics and logic probably support a yes answer.

• The practical question is often whether, e.g., one person’s armpit sweat smells differently from her hand sweat (they probably do) and, if so, whether both share commonalities that dogs can detect because we can’t always ensure scent from the same body parts; again, I see debate, though others may not. In any event, if there is a common scent, dogs must be trained for this commonality.
Are the Daubert Factors Met? I

• Larry Myers’ presentation gave you an overview of the science needed to answer this question. I will simply point out a few legal details.

• General: Myers shows that the technique is testable and has been tested; has been subjected to peer review and publication; reveals potential error rates; and is gaining acceptance in some professional communities. It is, however, partly a legal question whether the testing, etc. have been sufficient (FRE 702(1)) and what should be the relevant scientific community in which acceptance is required.
Are the Daubert Factors Met II? Limitations of the Tests Done

• There have been very few well-designed studies finding high accuracy rates.
• Even the seemingly best studies favoring the technique have not been “double-blind” because someone in the room, even if not the handler, knew who was the suspect.
• The results of these best studies are European and not replicated in the U.S.
• Many of the studies have been done by, or in connection with, law enforcement.
• The biggest scientific proponents of the technique in the U.S. are not biologists and thus not adequately trained in designing proper biological experiments.
Are the Daubert Factors Met? III: Error Rates

• Highly variable, ranging from a low of 12% to a purported high of around 95%.

• Success rates seem to vary tremendously based on the abilities of the individual dog, the training methods used, and the research design, as well as simply by chance.

• The research is still at too early a phase to say that there is a “known” error rate.
Are the Daubert Factors Met IV? Authoritative Standards

• Police departments in several European countries have standard protocols.
• These nations include The Netherlands, Germany, and Poland.
• These standards are informative but vary in important details.
• There is no authoritative body respected worldwide, certainly none in the United States, that has promulgated uniform, scientifically-supported standards – particularly no body independent of law enforcement
Are the Daubert Factors Met V? Widespread Acceptance

• Such acceptance must be among members of the “relevant field.”
• But what is that field? Dog handlers trained in the technique? Academic canine biologists studying the question and with no other vested interest in its resolution? Biologists not specifically studying lineups? Avoiding real or perceived biases suggests that, at a minimum, canine academic biologists should constitute the relevant field.
• There is likely widespread acceptance that, at least under some conditions, some properly trained dogs are biologically capable of discriminating among human odors.
• But the research has not proceeded far enough to say that there is *widespread acceptance* that a dog can be trained to use his biological capacity for scent discrimination consistently on demand.
Are the Daubert Factors Met: Standard of Proof

• Remember that the argument is that dog scent lineup evidence itself is scientific evidence that must comply with Daubert

• That puts the burden on the proponent – the prosecution – to prove to the judge’s satisfaction by a preponderance of the evidence that Daubert is met; no burden should be placed on the defense, though the defense is free to put on evidence and to cross-examine state witnesses and challenge their credibility at the admissibility hearing
Are the Daubert Factors Met VI?

Concluding Comments

• Taslitz, applying a pre-Daubert relevancy standard, concluded that the same factors now contained in the Daubert test were not met.

• More recently, a Polish scientist concluded that the Daubert test had not been met. See J. Wojcikiewicz, Scientific Evidence in Judicial Proceedings (Institute of Forensic Research Publishers, Krakow 2000).

• Still more recently, Adee Schoon, the leading Dutch researcher in the field, apparently conceded that Daubert was not met (she listed the Daubert factors but mis-named the test the Frye Test), concluding that, “if the situation in Europe continues on the direction it has taken now, and more scientists get involved in research and improvements, it will not be very long before the points ... [Daubert] has made can be met and the method can be presented as evidence in all countries that have adopted ... [Daubert].”
Are the Daubert Factors Met? VII: Deference Problems Introduced

• In Kumho Tire Co., Ltd. v. Carmichael, 526 U.S. 137 (1999), the Court stated this: “[W]hether Daubert’s specific factors are, or are not, reasonable measures of reliability in a particular case is a matter that the law grants the trial judge broad latitude to determine.”

• Some trial courts might thus decide that a better standard than the specific factors mentioned in Daubert would be the “traditional foundational requirements for tracking evidence.”
Are the Daubert Factors Met VIII?: The Traditional Foundational Requirements for Tracking Evidence Begun

• 5 Factors, Adapted to Scent Lineups: The particular dog must be:
  – 1. of pure blood and of a stock characterized by acuteness of scent and the power to discriminate among individual human beings ("breed requirement");
  – 2. accustomed and trained to discriminate among individual human beings ("discrimination requirement");
  – 3. found by experience in actual cases to be reliable in such discrimination ("experience requirement");
  – 4. placed on the scent of an article where the scent of the alleged criminal participant is present ("scent placement requirement");
  – 5. placed on such scent and for such identification purposes within the period of his efficiency ("timing requirement").
Traditional Foundational Requirements for Tracking Evidence Critiqued

<table>
<thead>
<tr>
<th>Breed Requirement</th>
<th>Motivation, training, experience, variations in individual hereditary traits and health matter too much to make breed a prerequisite</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discrimination Requirement</td>
<td>Useless as usually applied, namely via a handler’s testimony that he has repeatedly found his dog to be correct</td>
</tr>
<tr>
<td>Experience Requirement</td>
<td>Again useless if established solely by the handler’s testimony, as is usually the case</td>
</tr>
<tr>
<td>Scent Placement Requirement</td>
<td>A logical prerequisite to relevance but otherwise of little value concerning accuracy</td>
</tr>
<tr>
<td>Efficiency Requirement</td>
<td>Meaningless in practice, e.g., 21 month delay between robbery and lineup found within the efficiency period though no scientific support for that.</td>
</tr>
</tbody>
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Daubert and Deference Revisited

• Deference should not mean abdication
• The Daubert factors make sense given the traditional hard science nature of the problem.
• The tracking foundational factors are not rooted in science.
• Those factors confuse general principles and techniques – the Daubert question – with case-specific application (an FRE 702(3) question)
Open Questions

• How long can scent survive under non-controlled conditions in a form enabling a dog accurately to engage in scent discrimination?
• What environmental factors, if any, under non-controlled conditions can overwhelm a human scent, and can the dog adequately be trained to ignore all that environmental contamination? Have we experimentally adequately accounted for all these factors?
Expert Qualifications

• FRE 702 requires that experts be qualified by education, experience, training, etc.
• The nature of the necessary expertise should, however, be understood to vary with the expert’s role.
• There are 3 key roles:
  – Educator: able to testify about the theory and empirical data underlying principles and methods
  – Technician: able to testify about the proper administration of the scientific test in an individual case
  – Interpreter: able to testify to the meaning of the results obtained in an individual case
• Handlers can at best serve as technicians and interpreters but not as educators, so handler testimony alone is insufficient
• Even then, handlers must have enough familiarity with the underlying science to understand the technique’s limitations, different possible interpretations of the data, etc.
The Minor Premise: Has the Technique Been Properly Applied in the Individual Case? A Summary

• Textual Source: FRE 702(3)
• Follow proper procedures identified in Myers’ talk.
• The best guide is probably the current Dutch standards
• Avoid subjectivity and cues and miscues by supplementing the Dutch procedures with true double-blind methods
• Calibrating the Dog
• Lineup Size
• The Problem of Indeterminacy
Subjectivity and Cues and Miscues: Why True Double-Blind is Necessary (Pragmatic Relevancy)

- Handler and other persons’ behavior can influence the dog’s alert if anyone present knows who is the suspect, and this effect can be entirely unconscious.
- The best experiments have been single blind – the handler doesn’t know or influence who is the subject – but not double-blind, i.e., no one present knowing.
- Double-blind is the scientific gold standard.
Highlights of the Dutch Procedure Begun

• Step one: have the dog seek to match a control object to its mate. Failure to do any match or matching the wrong items disqualifies the dog on that date.
• Step two: if step one is survived, repeat it with a second row of items.
• Step three: if the dog in the above two steps showed a special interest in a non-matching odor, particularly if it is that of the suspect, disqualify the dog.
• Step four: do the actual lineup on row 1. Foil match terminates the lineup.
• Step five: repeat the actual lineup on row 2 if there was a row 1 suspect match. “Odor similarity” conclusion only if a second match to the suspect.
Calibrating the Dog I

• Like any scientific instrument, a dog must be “calibrated,” i.e., shown to be in good working order at the time of the test.

• Calibration is especially important because disease, re-training by an inadequately skilled handler, a particular dog being attracted to a particular foil’s scent, etc. can influence even a well-trained dog’s performance on a particular occasion.

• Schoon’s suggested method clearly takes account of this.
Calibrating the Dog II

• Myers at least once suggested that more thorough calibration would be better, e.g., testing using electro-encephalographic or behavioral olfactometry for sensory function and considering temperament, motor function, history of treatment by veterinarians, and the continuing training of the handler

• There is no formal calibration process mandated in the U.S., just as there is no formal certification process for dog or handler
Lineup Size

• Larger lineups reduce the risk of error.
• Ex. If the total lineup size is 4, a dog merely guessing has a 25% chance of picking the suspect simply by guessing rather than by scent “matching.”
• If the total lineup size is 8, the false positive guess chances fall to 12 ½ %
• There are no authoritative U.S. standards for lineup size; bigger is better, but there must be a practical limit.
• Schoon often uses 7: 6 foils, 1 suspect
The Problem of Indeterminacy (Relevance)

• If we know the statistical likelihood of error by properly-trained dogs, how easy is it to tell whether the dog made such an error in this case?

• If we know the performance record of an individual dog under varied circumstances, how easy is it for the jury to tell whether this case’s alert fell into the accurate or the inaccurate choice range?

• If these problems are great enough, there may be a 403 and a 702 (helpfulness to the jury) objection
Corroboration Requirement

• In tracking cases, some jurisdictions require “corroborating evidence.”
• For some this means corroboration by other “direct” evidence that, standing alone, could support the defendant’s conviction.
• For other jurisdictions, this means circumstantial evidence and need not alone be sufficient to support the defendant’s conviction.
• Scientific doubts about the lineup process or how it has been conducted in this case support arguments that a robust corroboration requirement is necessary in lineup cases too, and some courts have so held
Hearsay and the Confrontation Clause

- Hearsay and confrontation clause issues concerning scenting evidence have been litigated, and there are reported cases.
- This is not a fruitful area for challenge.
- The hearsay rule applies only to humans, as does the Confrontation Clause.
- Any challenges would thus need to be to a human, e.g., concerning the handler or his report, pursuant to the usual rules in this area.
Fourteenth Amendment Due Process Challenges to Lineup Fairness I

- General Rule 1: The 14th Amendment due process clause excludes any pre-trial identification that was so unnecessarily suggestive as to create a very substantial likelihood of misidentification.
- General Rule 2: If Rule 1 is met, the in-court identification may also be suppressed if the out-of-court identification was so unnecessarily suggestive as to create a very substantial likelihood of irreparable mistaken identification.
- It can be argued, though it is an open question, that ignorance of the relevant science by the police does not render a suggestive identification “necessary.” (See Taslitz, Unscientific Myth, 42 Hastings L.J. 15, 93-99 (1990)).
- The evidentiary challenges can thus also become constitutional ones.
14th Amendment Lineup Fairness II

• Reliability is the “lynchpin” of the analysis
• The Manson v. Braithwaite factors for humans are instructive but don’t really work for dogs and must be re-crafted based upon the science.
• The Braithwaite factors for humans:
  – W’s opportunity to view perpetrator at time of crime
  – W’s degree of attention
  – Accuracy of W’s description
  – W’s degree of certainty
  – Time between crime and confrontation (See Taslitz, Unscientific Myth, supra, at 99-107)
Role of Counsel and Fair Lineups

• 14th Am. Rule: 6th Am. right to counsel at all post-indictment “critical stages” of a criminal case
• Although scientific tests are not considered “critical stages,” live lineups are because there is a live, present client to be counseled.
• Scent lineups are both, but, given client’s presence, good argument counsel required
• 14th Am. due process case law is unclear: counsel’s role as mere observer or as active advisor? Argue both.
The Human Eyewitness Analogy and Its Advantages

• Similar objections have been raised to flawed human visual lineup procedures
• Law reformers routinely embrace such reforms as double‐blinding, larger lineup size, minimizing suggestion, etc.
• Law reformers recognize that these questions are scientific ones
• See ABA CJS, Report of the Ad Hoc Committee on Innocence and the Integrity of the Criminal Justice System (2006)
The Full Disclosure Alternative Summarized

1. Discovery
2. Adversary Attack
3. Demonstrations and Independent Testing
4. Jury Instructions
5. A Multi-Pronged Attack
The Second Prong of the Ineffective Assistance Claim Explained

• The 2nd Prong Stated: requires a showing of “prejudice,” i.e., but for counsel’s unprofessional errors, the result the result of the proceeding would have been different. A reasonable probability is a probability sufficient to undermine confidence in the outcome.

• Likely jury impact of scent lineup evidence would seem critical to this analysis, and that impact turns on both empirical and cultural data
Jury Impact and the Second Prong: Psychological Evidence

• The Key Study Thus Far: *Sniffing Out the Truth: Examining the Impact of Dog Scent Lineups on Jurors’ Decisions*, by Robin Maria Valeri, St. Bonaventure University, Kevin Borgeson, Salem State College

• 3 Experiments: Results Summarized on the next few slides
Psychological Evidence II

• **Experiment No. 1:**
  • Experiment 1 compares the impact of scent lineup evidence on mock jurors’ decisions to eyewitness identification, scientific evidence, and a control condition in which circumstantial evidence links the defendant to the crime but no other means of identifying the defendant exist.
  • Jurors were more likely to believe a suspect was correctly identified, the evidence was stronger, and the prosecution’s case was stronger when scent lineup evidence was present than in the control condition.
  • There were no significant differences between scent lineup evidence, eyewitness identification, and scientific evidence on jurors’ decisions.
Psychological Evidence III: Experiment 2

• **Experiment 2 Results:**
  
  Experiment 2 examines the impact of liking for dogs, accuracy relevant information, and judicial instructions regarding scent lineups on mock jurors’ decisions.

  • Jurors’ decisions were not related to liking for dogs or affected by accuracy relevant information.

  • **Cautionary Instructions:** However, jurors were less confident the suspect was correctly identified and rated the scent identification evidence as significantly less credible when judicial instructions were present versus absent. **But this skepticism did not alter verdicts.**
Jury Impact and the Second Prong: Cultural Evidence

• There is also ample cultural evidence suggesting that most judges and jurors alike see dog scenting as infallible

• Sources of cultural evidence:
  – Judges’ statements in reported appellate opinions
  – Movies, novels, TV shows, short stories, great literature
  – 1968 ABA statement that jurors will be swayed by a “superstitious faith” in dog scenting
  – Wigmore making similar warnings, 1A J. Wigmore, Evidence, sec. 177, at 1852 (1983)
Summary of Ineffective Assistance Claims to Raise

• Failure to:
  – Research the science
  – Move to suppress the evidence
  – Seek cautionary jury instructions
  – Conduct specialized voir dire
  – Offer an expert
  – Obtain adequate discovery
  – Cross-examine adequately
  – Demonstrate effect on the jury
Short Bibliography of Key Sources I

• Adee Schoon & Ruud Haak, Suspect Discrimination: Training and Practicing Scent Identification Lineups (2002) (See the bibliography for chapters 5 through 8 too)

• *Does the Cold Nose Know? The Unscientific Myth of the Dog Scent Lineup*, 42 *Hastings L. J.* 15-134 (1990)


Short Bibliography II


• People v. Willis, 115 Cal. App. 4th 379 (2d Dist. 2004)


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