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## Scientific Evidence in the Sam Sheppard Case

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# SCIENTIFIC EVIDENCE IN THE SAM SHEPPARD CASE

PAUL C. GIANNELLI<sup>1</sup>

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Good afternoon. I am honored to have been invited to this conference, and I want to congratulate my colleagues at Cleveland State for putting together an excellent program.

## I. RELIABILITY OF SCIENTIFIC EVIDENCE

My panel is discussing reliable jury verdicts, and my topic is “scientific” evidence. One way to approach this issue is to compare scientific evidence with other methods of proof. After I graduated from law school, I served in the military where I tried cases as a defense counsel and later as a prosecutor. The trial lawyers that I worked with viewed cases as falling primarily into one of three categories: eyewitness cases, confession cases, and “scientific” evidence cases. In this scheme, anything that was not an eyewitness, confession, or snitch case was a “scientific evidence” case.<sup>2</sup> These categories, of course, are neither exhaustive<sup>3</sup> nor mutually exclusive; often two and sometimes all three are involved. Nevertheless, these categories are helpful because they present trial attorneys with very different problems of proof.

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<sup>1</sup>Albert J. Weatherhead III & Richard W. Weatherhead Professor of Law, Case Western Reserve University.

<sup>2</sup>After the Supreme Court’s opinion in *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993), perhaps the term “physical evidence” is more apt in this context. In *Daubert*, the Court defined “scientific” evidence under Federal Rule of Evidence 702 as evidence based on the “scientific” method: “[I]n order to qualify as ‘scientific knowledge, an inference or assertion must be derived by the scientific method. Proposed testimony must be supported by appropriate validation—*i.e.*, ‘good grounds,’ based on what is known. In short, the requirement that an expert’s testimony pertain to ‘scientific knowledge’ establishes a standard of evidentiary reliability.” *Daubert*, 509 U.S. at 590.

<sup>3</sup>Cases in which accomplices or coconspirators turn “state’s evidence” and testify against their former colleagues would be another category.

The DNA exoneration cases not only establish the fact of wrongful convictions, they tell us something about the reliability of each of these categories.<sup>4</sup>

#### A. Eyewitness Identifications

Commentators have noted that the wrongful convictions in the DNA exoneration cases were based on misidentifications eighty four percent of the time.<sup>5</sup> But the pitfalls of eyewitness identifications have been known for more than seventy years, going back to at least the Sacco and Vanzetti trial,<sup>6</sup> and there is substantial experimental research on this subject.<sup>7</sup> However, we have yet to implement the insights gained from this research. The Warren Court recognized the problem<sup>8</sup> and attempted to address it through the right to counsel<sup>9</sup> and due process guarantees.<sup>10</sup> The Burger Court, however, restricted the applicability of the right to counsel<sup>11</sup> and watered down the due process test.<sup>12</sup>

<sup>4</sup>The exoneration cases are discussed in EDWARD CONNORS ET AL., CONVICTED BY JURIES, EXONERATED BY SCIENCE: CASE STUDIES IN THE USE OF DNA EVIDENCE TO ESTABLISH INNOCENCE AFTER TRIAL (1996) (hereinafter CONNORS) (discussing twenty-eight cases) and BARRY SCHECK ET AL., ACTUAL INNOCENCE: FIVE DAYS TO EXECUTION AND OTHER DISPATCHES FROM THE WRONGLY CONVICTED 246 (2000) (hereinafter SCHECK) (“In 1999, the Innocence Project reconstructed sixty-two cases in the United States of the sixty-seven exoneration in North America to determine what factors had been prevalent in the wrongful convictions ....”).

<sup>5</sup>See SCHECK, *supra* note 4, at 246 (“Mistaken eye-witnesses were a factor in 84 percent of the convictions ....”).

<sup>6</sup>FELIX FRANKFURTER, THE CASE OF SACCO AND VANZETTI 30 (1927) (“What is the worth of identification testimony even when uncontradicted? The identification of strangers is proverbially untrustworthy.”). See also EDWIN BORCHARD, CONVICTING THE INNOCENT 367 (1932) (“Perhaps the major source of these tragic errors is an identification of the accused by the victim of a crime of violence. This mistake was practically alone responsible for twenty-nine of these [sixty-five] convictions”); HUGO MUNSTERBERG, ON THE WITNESS STAND: ESSAYS ON PSYCHOLOGY AND CRIME 44 (1908) (“Justice would less often miscarry if all who are to weigh evidence were more conscious of the treachery of human memory.”).

<sup>7</sup>See 1 PAUL C. GIANNELLI & EDWARD J. IMWINKELRIED, SCIENTIFIC EVIDENCE § 9.2 (3d ed. 1999) (discussing research).

<sup>8</sup>See *United States v. Wade*, 388 U.S. 218, 228 (1967) (“The vagaries of eyewitness identification are well-known; the annals of criminal law are rife with instances of mistaken identification.”). See also *Watkins v. Sowders*, 449 U.S. 341, 352 (1981) (stating that “there is almost *nothing more convincing* than a live human being who takes the stand, points a finger at the defendant, and says ‘That’s the one!’”) (Brennan, J., dissenting) (citations omitted).

<sup>9</sup>See *United States v. Wade*, 388 U.S. 218 (1967); *Gilbert v. California*, 388 U.S. 263 (1967). See generally 1 WAYNE LAFAYETTE ET AL., CRIMINAL PROCEDURE § 7.3 (2d ed. 1999).

<sup>10</sup>See *Stovall v. Denno*, 388 U.S. 293, 302 (1967) (holding that an “unnecessarily suggestive” identification procedure violated due process).

<sup>11</sup>In *Kirby v. Illinois*, 406 U.S. 682, 688 (1972), the Court held that the right to counsel did not attach until the commencement of judicial adversary proceedings—for example, at the initial appearance before a magistrate. Accordingly, an arrest by itself does not trigger the right to counsel. Because many, if not most, lineups occur prior to the initiation of judicial proceedings, the right to counsel has not played a major role in later cases. Moreover, the Court ruled in *United States v. Ash*, 413 U.S. 300 (1973), that the right to counsel did not

### B. Confessions

The DNA exonerations also include some false confession cases.<sup>13</sup> For example, David Vasquez, who was border-line mentally retarded,<sup>14</sup> confessed to a crime which he did not commit.<sup>15</sup> In fact, he pleaded guilty to avoid the death penalty. He was later exonerated. By focusing on Vasquez, the police overlooked Timothy Spencer, a brutal serial murder-rapist who actually committed the crime.<sup>16</sup>

Indeed, the first forensic DNA case, which occurred in England in 1986, involved a false confession.<sup>17</sup> The police were investigating two brutal killings of young women three years apart and obtained a confession to one of them.<sup>18</sup> But their suspect, Howard, refused to confess to the second murder. Nevertheless, the police believed the second murder was so similar to the first murder that it had to have been committed by the same person. They sought out Dr. Jeffreys in an attempt to tie Howard to the second murder through DNA analysis. Jeffreys surprised the police when he concluded that both murders were committed by the same person but the suspect was not the assailant. Another person later confessed to both crimes, and his DNA matched the crime scene evidence.

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apply at a photographic display, even if the display was conducted after the attachment of the right to counsel.

<sup>12</sup>The *Stovall* due process test, which focused on the identification procedure itself, was subsequently modified. See *Manson v. Brathwaite*, 432 U.S. 98 (1977). The new test focuses on the reliability of the actual identification in the case. Thus, an identification based on an unnecessarily suggestive procedure may nevertheless be admissible if found to be “reliable.”

<sup>13</sup>See SCHECK, *supra* note 4, at 246 (In wrongful conviction cases, false confessions played a role “in 24 percent” of the cases). Confessions are also problematic because of the way police conduct them; these methods raise constitutional issues.

<sup>14</sup>See PAUL MONES, *STALKING JUSTICE: THE DRAMATIC TRUE STORY OF THE DETECTIVE WHO FIRST USED DNA TESTING TO CATCH A SERIAL KILLER 78-80* (1995) (Vasquez’s confession was based on a “dream” and his account was incoherent and inconsistent; the police convinced Vasquez that his fingerprints were found at the scene, and then they fed him the details of the crime); CONNORS, *supra* note 4, at 73 (discussing Vasquez case).

<sup>15</sup>See generally Peter Brooks, *Storytelling Without Fear? Confession in Law and Literature*, 8 *YALE J.L. & HUMAN.* 1 (1996); Gisli H. Gudjonsson, *The Psychology of False Confessions*, 57 *MEDICO-LEGAL J.* 93 (1989) (discussing coerced-complaint confessions and coerced-internalized confessions); Richard A. Leo, *Criminal Law: The Impact of Miranda Revisited*, 86 *J. CRIMINOLOGY & CRIM. L.* 621 (1996); Arye Rattner, *Convicted But Innocent: Wrongful Conviction in the Criminal Justice System*, 12 *LAW & HUM. BEHAV.* 283 (1988).

<sup>16</sup>See MONES, *supra* note 14.

<sup>17</sup>See JOSEPH WAMBAUGH, *THE BLOODING* (1989) (discussing the investigation and capture of Colin Pitchfork for the rape-murders of Lynda Mann in 1983 and Dawn Ashworth in 1986); NOVA, *MURDER, RAPE AND DNA* (1988) (films for the humanities & sciences).

<sup>18</sup>HARLAN LEVY, *AND THE BLOOD CRIED OUT: A PROSECUTOR’S SPELLBINDING ACCOUNT OF THE POWER OF DNA* 29 (1996) (“Not only was [Howard] innocent of the first murder but he had falsely confessed to the rape and murder of [the second victim].”).

### C. Scientific-Physical Evidence

The third type of evidence is physical/scientific evidence. There are statements in some Warren Court opinions emphasizing the reliability of this type of evidence when compared with confessions and lineups. For example, in *Escobedo v. Illinois*,<sup>19</sup> the Court observed: “We have learned the lesson of history, ancient and modern, that a system of criminal law enforcement which comes to depend on the ‘confession’ will, in the long run, be less reliable and more subject to abuses than a system which depends on extrinsic evidence independently secured through skillful investigation.”<sup>20</sup> Moreover, Justice Brennan, writing in *Davis v. Mississippi*,<sup>21</sup> commented:

Detention for fingerprinting may constitute a much less serious intrusion upon personal security than other types of police searches and detentions. Fingerprinting involves none of the probing into an individual’s private life and thoughts that marks an interrogation or search. Nor can fingerprint detention be employed repeatedly to harass any individual, since the police need only one set of each person’s prints. Furthermore, fingerprinting is an inherently more reliable and effective crime solving tool than eyewitness identifications or confessions and is not subject to such abuses as the improper lineup and the “third degree.”<sup>22</sup>

Scientific evidence, as the DNA exoneration cases demonstrate, is often more reliable than other types of evidence; and we should be further developing our capabilities to use such evidence. Scientific proof, however, raises its own problems.

## II. RECENT DEVELOPMENTS

There have been several significant developments in scientific evidence in the last decade, all of which involve reliability concerns in one way or another. First, the *Daubert* decision and its progeny, especially *Kumho Tire Co. v. Carmichael*,<sup>23</sup> have had a profound affect on scientific evidence. In *United States v. Hines*,<sup>24</sup> a district court wrote that *Kumho* “plainly invite[s] a reexamination even of ‘generally accepted’ venerable, technical fields.”<sup>25</sup> As a result of its reexamination of

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<sup>19</sup>378 U.S. 478 (1964).

<sup>20</sup>*Id.* at 488-89. See also *Breithaupt v. Abram*, 352 U.S. 432, 439 (1957) (“Modern community living requires modern scientific methods of crime detection lest the public go unprotected.”).

<sup>21</sup>394 U.S. 721 (1969).

<sup>22</sup>*Id.* at 727.

<sup>23</sup>526 U.S. 137 (1999) (holding that “*Daubert*’s general holding—setting forth the trial judge’s general ‘gatekeeping’ obligation—applies not only to testimony based on ‘scientific’ knowledge, but also to testimony based on ‘technical’ and ‘other specialized’ knowledge.”).

<sup>24</sup>55 F. Supp. 2d 62 (D. Mass. 1999).

<sup>25</sup>*Id.* at 67. See also *United States v. Starzeczyzel*, 880 F. Supp. 1027, 1038 (S.D.N.Y. 1995) (“[T]he testimony at the *Daubert* hearing firmly established that forensic document examination, despite the existence of a certification program, professional journals and other trappings of science, cannot, after *Daubert*, be regarded as ‘scientific ... knowledge.’”). See

handwriting evidence, the court restricted admissibility of this well-accepted technique. Other techniques such as hair comparisons<sup>26</sup> and even fingerprint identification<sup>27</sup> have been challenged.

Second, the advent of DNA evidence has had a profound impact. There were extensive battles over DNA admissibility, and some commentators at this conference were principals in those cases – for example, Terry Gilbert and Jim Wooley.<sup>28</sup> The DNA admissibility battles had a salutary effect. The research scientists who testified as experts in the DNA cases came from a “scientific” culture, unlike the many forensic scientists who work in crime laboratories and are sometimes “cops in lab coats.” These scientists were comfortable with quality control procedures, demanded written protocols, viewed proficiency testing as a positive development, and believed in open science and “not trial by ambush.” Commentators began to ask why such procedures were not applied in other forensic fields.<sup>29</sup>

The third development was the disclosure of the abuses in the use of scientific evidence. Fred Zain was Chief Serologist for ten years in West Virginia. In reviewing a judicial report on Zain’s misconduct, the West Virginia Supreme Court spoke of “shocking and . . . egregious violations,” “corruption of our legal system,” and “mock[ing] the ideal of justice under law.”<sup>30</sup> West Virginia prosecutors, upset

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also Andre Moenssens, *Handwriting Identification Evidence In the Post-Daubert World*, 66 UMKC L. REV. 251 (1997); D. Michael Risinger et al., *Brave New “Post-Daubert World”—A Reply to Professor Moenssens*, 29 SETON HALL L. REV. 405 (1998).

<sup>26</sup>See *Williamson v. Reynolds*, 904 F. Supp. 1529, 1558 (E.D. Okl. 1995) (“This court has been unsuccessful in its attempts to locate any indication that expert hair comparison testimony meets any of the requirements of *Daubert*.”), *rev’d*, *Williamson v. Ward*, 110 F.3d 1508, 1522-23 (10th Cir. 1997) (due process, not *Daubert*, standard applies in habeas proceedings). See also Paul C. Giannelli & Emmie West, *Hair Comparison Evidence*, 37 CRIM. L. BULL. 514 (2001) (discussing the DNA exoneration cases in which hair evidence was used to convict the innocent).

<sup>27</sup>See *United States v. Havvard*, 117 F.Supp.2d 848 (S.D. Ind. 2000) (upholding admissibility), *aff’d*, 260 F.3d 597 (7th Cir. 2001). See also Mark Hansen, *Dusting for Daubert: Several Defense Lawyers Argue Fingerprint Evidence Is Not Scientific. So far, the Courts Aren’t Buying It*, 86 A.B.A. 20 (2000) (“In the last year alone, more than a dozen so-called *Daubert* challenges to the admissibility of fingerprint identification evidence have been filed in state and federal courts around the country. In the three cases that have been decided so far, the courts have all admitted the fingerprint evidence. But critics say the battle isn’t over yet”).

<sup>28</sup>See *United States v. Bonds*, 12 F.3d 540, 568 (6th Cir. 1993) (DNA). As an aside, I can say that these lawyers did a great job, especially compared to their colleagues who dealt so poorly with “voiceprints” and hypnotically-fresh testimony. See generally GIANNELLI, *supra* note 7, at ch. 10 (discussing “voiceprint” evidence); *id.* at ch. 12 (discussing hypnotically-refreshed testimony).

<sup>29</sup>See Michael J. Saks & Jonathan J. Koehler, *What DNA “Fingerprinting” Can Teach the Law About the Rest of Forensic Science*, 13 CARDOZO L. REV. 361, 372 (1991) (“[F]orensic scientists, like scientists in all other fields, should subject their claims to methodologically rigorous empirical tests. The results of these tests should be published and debated. Until such steps are taken, the strong claims of forensic scientists must be regarded with far more caution than they traditionally have been.”).

<sup>30</sup>The report by the judge states:

when Zain left because they could not get the great results Zain produced, sent the evidence down to Zain in his new job in San Antonio. He never failed them.

Dr. Erdman faked autopsies for a decade in Texas.<sup>31</sup> In one case, Erdmann ruled that a 16-month old child died from a blow to the stomach, a finding that led to the murder indictment of the child's father. A second autopsy, conducted by different pathologists, cited drowning as the cause of death, a conclusion consistent with the father's version of an accidental death. But the defense was not the only side hurt by Dr. Ralph's misconduct. He also declared that murder victims had died "due to natural causes."

The Inspector General's 1997 report on the FBI laboratory also raised serious issues of laboratory negligence and misconduct.<sup>32</sup> The investigation found scientifically flawed testimony, inaccurate testimony, testimony beyond the competence of FBI examiners, improper preparation of laboratory reports, insufficient documentation of test results, scientifically flawed reports, inadequate record management and retention, and failures of management to resolve serious and credible allegations of incompetence. The report's recommendations are revealing because they are so basic—and so obvious. They include: seeking accreditation of the FBI laboratory by the American Society of Crime Laboratory Directors/Laboratory Accreditation Board; requiring examiners in the Explosives Unit to have scientific backgrounds in chemistry, metallurgy, or engineering; mandating that each examiner who performs work prepare and sign a separate report instead of having one report "without attribution to individual examiners"; reviewing analytical reports by unit chiefs; preparing adequate case files to support reports; monitoring court testimony in order to preclude examiners from testifying to matters beyond their expertise or in ways that are "unprofessional"; and developing written protocols for scientific procedures.

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The acts of misconduct on the part of Zain included (1) overstating the strength of results; (2) overstating the frequency of genetic matches on individual pieces of evidence; (3) misreporting the frequency of genetic matches on multiple pieces of evidence; (4) reporting that multiple items of evidence had been tested, when only a single item had been tested; (5) reporting inconclusive results as conclusive; (6) repeatedly altering laboratory records; (7) grouping results to create the erroneous impression that genetic markers had been obtained from all samples tested; (8) failing to report conflicting results; (9) failing to conduct or to report conducting additional testing to resolve conflicting results; (10) implying a match with a suspect when testing supported only a match with the victim; and (11) reporting scientifically impossible or improbable results.

*In re* Investigation of the W. Va. State Police Crime Lab., Serology Div., 438 S.E.2d 501, 508 (W. Va. 1993) (quoting report). See Paul C. Giannelli, *The Abuse of Scientific Evidence in Criminal Cases: The Need for Independent Crime Laboratories*, 4 VA. J. SOC. POLICY & L. 439 (1997). See also David Bernstein, *Junk Science in the United States and the Commonwealth*, 21 YALE J. INT'L L. 123 (1996) (discussing cases in Canada, Australia, New Zealand, and England).

<sup>31</sup>See GIANNELLI, *supra* note 30 (discussing Erdmann).

<sup>32</sup>U.S. DEPARTMENT OF JUSTICE, OFFICE OF INSPECTOR GENERAL, THE FBI LABORATORY: AN INVESTIGATION INTO LABORATORY PRACTICES AND ALLEGED MISCONDUCT IN EXPLOSIVES-RELATED AND OTHER CASES (April 1997) [hereinafter I.G. REPORT].

### III. SAM SHEPPARD CASE

The *Sheppard* case offers some valuable lessons in the use of experts. It also provides a time line, permitting us to compare the treatment of experts at each of the various trials. I have spent a couple of weeks reading the Sam Shepard cases<sup>33</sup> as well as books on the various trials.

#### A. Crime Scene Search

The first thing that struck me was the crime scene search. It was botched.<sup>34</sup> The crime scene was not properly secured, too many people had access to the house, and there was also an improperly protected outside crime scene. As one commentator has said: “Even the most sophisticated forensic instrumentation cannot remedy errors made during the identification, collection, preservation, and transportation of evidence from the scene to the forensic laboratory.”<sup>35</sup>

This reminded me of the Dr. Jeffrey McDonald case.<sup>36</sup> I was stationed at Fort Bragg with the 82nd Airborne Division at the time of the initial investigation of McDonald for the killings of his wife and his two kids.<sup>37</sup> I remember speaking to the

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<sup>33</sup>See *Sheppard v. Maxwell*, 384 U.S. 333 (1966) (overturing 1954 conviction due to prejudicial publicity); *State ex rel Tubbs Jones v. Suster*, 701 N.E.2d 1002 (Ohio 1998) (permitting wrongful imprisonment civil suit to go forward); *State v. Sheppard*, 135 N.E.2d 340, 342 (Ohio 1956) (“Murder and mystery, society, sex and suspense were combined in this case in such a manner as to intrigue and captivate the public fancy to a degree perhaps unparalleled in recent annals.”).

<sup>34</sup>See James F. McCarty, *Body of Evidence*, CLEVELAND PLAIN DEALER, Nov. 10, 1996, Sunday Magazine, at 9 (“By modern forensic standards, the police investigation was a disaster. Crowds of gawkers were permitted to walk all over the crime scene. Some evidence was mishandled and misinterpreted, other evidence ignored, even covered up. A trail of blood led from the murder scene in the bedroom all the way to the basement, yet was dismissed by police as the victim’s, dripping from the murder weapon, and was never tested for blood type.”).

<sup>35</sup>Bruce H. Hanley & Steven C. Clark, *Developing National Guidelines for Death Scene Investigations*, 14 CRIM. JUST. 26 (1999). See also Mark Hansen, *Body of Evidence*, 81 A.B.A. J. 60 (1995) (death investigations in U.S. are “no better than what they have in many Third World countries,” quoting Dr. Werner Spitz; “It’s a national disgrace,” quoting Dr. Michael Baden).

<sup>36</sup>See *United States v. MacDonald*, 456 U.S. 1 (1982) (rejecting speedy trial claim ); *United States v. MacDonald*, 688 F.2d 224 (4th Cir. 1982) (affirming conviction); *United States v. MacDonald*, 640 F. Supp. 286 (D.N.C. 1985) (denying habeas relief); *United States v. MacDonald*, 607 F. Supp. 1183 (D.N.C. 1985) (denying government’s pleas for forfeiture of book proceeds); *United States v. MacDonald*, 779 F.2d 962 (4th Cir. 1985) (affirming denial of motion for new trial on habeas corpus).

<sup>37</sup>See JOE MCGINNISS, *FATAL VISION* 96-97 (1983) (“MacDonald’s pajama bottoms, for example—potentially crucial evidence—had been discarded by a hospital orderly in the emergency room and had been burned with the rest of the hospital trash. In addition, the MPs assigned to guard the exterior of 544 Castle Drive on the morning of February 17, had allowed the Fort Bragg trash collectors to empty the MacDonald garbage cans before any CID agent had thought to examine the rubbish for possible evidence—such as a bloodstained pair of disposable rubber surgeon’s gloves. Such gloves, of course, could as easily have been flushed down the toilet. But before this thought had occurred to agents at the scene (four days after



Army prosecutor in that case. One of the reasons the Army did not go forward with the case (although McDonald was later convicted in a federal district court) was the mishandling of crime scene evidence.

If we “fast forward” to the last decade, what have we learned? Let me quote from a police chief in the post-O.J. Simpson era. He wrote that “the handling of evidence until it reaches the crime lab will be as important as the laboratory technology procedures themselves.”<sup>38</sup> This was clearly illustrated by the JonBenet Ramsey investigation, where a detective “further contaminated the crime scene by placing a blanket over the body and by allowing 10 people to mill throughout the house.”<sup>39</sup>

Former Attorney General Janet Reno has cautioned that “[a]mong the tasks ahead are ... maintaining the highest standards for the collection and preservation of DNA evidence.”<sup>40</sup> As a result, the Justice Department, to its credit, has published a crime scene investigation guide for law enforcement.<sup>41</sup> We do a very poor job of training our police officers. You can not train them at the crime scene. They have to be trained ahead of time to be able to react in a professional manner to some very gory and bloody situations.

### B. Challenging Expert Testimony: The Need for Pretrial Discovery

Another striking point in the Sheppard trial was how the experts were challenged in these three trials. We have a rather unusual opportunity to scrutinize the use of scientific evidence because we have three different trials of the same case to

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the murders), the laboratory technicians from Fort Gordon had been making such regular use of the toilet facilities as to assure that evidence disposed of by such means would have been long since carried into the main sewer lines and lost forever. Blunders by lab technicians had not stopped there. When one, using a saw, had attempted to remove the bloody footprint from the floor of Kristen’s room, the boards on which the print had been made had separated and the print itself had been destroyed. Even back at the laboratory, inexcusable mistakes continued to be made. The piece of skin found beneath Colette’s fingernail, for instance, had inexplicably been lost. And lost, too, was the vial which contained the blue fiber that had been scraped from beneath the fingernail of Kristen.”)

<sup>38</sup>CONNORS, *supra* note 4, at xxvi (“[T]he O.J. Simpson case and other recent sensational trials have put law enforcement under an intensely powerful microscope, examining our most basic procedures for collecting, processing, and caring for evidence.”).

<sup>39</sup>James Brooke, *Bungled JonBenet Case Bursts a City’s Majesty*, N.Y. TIMES, Dec. 5, 1997, at A10.

<sup>40</sup>CONNORS, *supra* note 4, at iii.

<sup>41</sup>*See* DEPARTMENT OF JUSTICE, CRIME SCENE INVESTIGATION: A GUIDE FOR LAW ENFORCEMENT 28 (2000) (“Evidence at crime scenes that is in the process of documentation, collection, preservation, or packaging should be handled with attention to scene integrity and protection from contamination or deleterious change. During the processing of the scene, and following documentation, evidence should be appropriately packaged, labeled, and maintained in a secure, temporary manner until final packaging and submission to a secured evidence storage facility or the crime laboratory.”). *See also* DEPARTMENT OF JUSTICE, NATIONAL GUIDELINES FOR DEATH INVESTIGATIONS 20 (1997) (“It is essential to maintain a proper chain of custody for evidence. Through proper documentation, collection, and preservation, the integrity of the evidence can be assured. A properly maintained chain of custody and prompt transfer will reduce the likelihood of a challenge to the integrity of the evidence.”).

compare. At the 1954 trial, scientific evidence apparently played a significant role. In his book on the *Sheppard* case, Paul Holmes wrote:

The prosecution got considerable benefit from the evidence of its scientific investigators. The prosecutors made a production out of the presentation of testimony by the investigators, conveying an impression that this was mighty deep stuff and consequently mighty important. The jurors heard a lot of scientific terms and multi-syllable names of many chemical compounds. They heard defense lawyers objecting loudly to the drawing of conclusions about the meanings of some of the tests and saw them fighting tenaciously to keep some of the prosecutions's queries from being answered. In over-all effect this implied that ... [the information] ... must somehow be severely damaging to Sam, even if hard to follow and understand.<sup>42</sup>

In particular, Dr. Gerber's testimony about a "surgical instrument" leaving an impression on a pillow case made a powerful impression. However, the defense failed to challenge this evidence. As one commentator noted: "[Defense counsel] Corrigan committed a crucial mistake in overlooking the susceptibility of jurymen to Gerber's fanciful interpretation of blood clues. He should have tried to find a specialist who could have countered Gerber's flash of inspiration with cogent findings. Even worse, the lawyer seems never to have thought that the murder room and its unexamined bloodstains might provide evidence valuable for the defense."<sup>43</sup> Consequently, on the day of trial, "Corrigan stood empty-handed as far as scientific evidence went."<sup>44</sup>

In the second trial, F. Lee Bailey, the new defense counsel, undercut Dr. Gerber on cross-examination.<sup>45</sup> Bailey had an advantage over Corrigan. He had Gerber's testimony from the first trial.<sup>46</sup> This is a critical factor, especially in dealing with scientific evidence. To this day, discovery depositions are unavailable in Ohio<sup>47</sup> and

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<sup>42</sup>PAUL HOLMES, *THE SHEPPARD MURDER CASE* 134-37 (1980) ("The prosecution's test-tube brigade put a lot of time, energy, and skill into testing blood spots around the house but ignored completely the room in which Marilyn Sheppard was murdered.").

<sup>43</sup>JURGEN THORWALD, *CRIME AND SCIENCE: THE NEW FRONTIER IN CRIMINOLOGY* 147-48 (1966).

<sup>44</sup>*Id.* at 148.

<sup>45</sup>F. LEE BAILEY, *THE DEFENSE NEVER RESTS* 86-87 (1971) ("At the first trial, Dr. Gerber had gotten a lot of mileage out of the bloodstains on Marilyn's pillow, testifying that in one bloodstain he could make out the impression of a surgical instrument. He never specified the instrument, but described the imprint as being that of two three-inch blades, with indentations at the end of each blade as if they had teeth.").

<sup>46</sup>*Id.* at 86 ("Then there was Dr. Samuel Gerber, the state's number one witness at the first trial, the white-haired coroner who has leapt into action with an inquest at the snap of a *Cleveland Press* editorial. To put it mildly, I was waiting for Dr. Gerber.").

<sup>47</sup>An attorney may depose only his own witnesses for the purpose of preserving their testimony in anticipation of their unavailability at the time of trial. See 2 LEW KATZ & PAUL GIANNELLI, *BALDWIN'S OHIO PRACTICE, CRIMINAL LAW* ch. 49 (1996) (discussing defense discovery and depositions).

most other jurisdictions.<sup>48</sup> Paradoxically, discovery depositions were available for the latest trial because it was a civil suit.

Paul Kirk was probably the most important expert at the second trial.<sup>49</sup> Where was he at the first trial? He was not hired until after the first verdict. Why wasn't he hired before then? There is some indication that Corrigan did not have access to the house, the murder scene. But he apparently did not vigorously pursue this issue by filing a motion. He did not tell the judge, "I have an expert. I need to get in there."<sup>50</sup>

In the third trial, the civil case recently completed, other experts scrutinized Paul Kirk's analysis. Kirk was one of the founding fathers of blood spatter analysis. But there are questions about his conclusion that a left-handed person committed the crime and the existence of a possible bite mark on the assailant's hand.<sup>51</sup> There are thirty to forty reported blood-spatter cases today. How can an attorney, in this case the prosecutor, deal with Paul Kirk without knowing all this ahead of time?<sup>52</sup> I do not think that he or she can.

### C. Access to Experts

There were numerous experts at the civil trial: forensic dentists, forensic pathologists, forensic anthropologists, DNA analysts, and blunt instrument trauma experts (who attempted to determine how serious Dr. Sheppard's injuries were). There were also the blood spatter experts. Moreover, "crime scene" experts (profilers) were retained to determine whether the scene indicated domestic violence

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<sup>48</sup>See GIANNELLI, *supra* note 7, at ch. 3 (discussing discovery of scientific evidence).

<sup>49</sup>See Edward Imwinkelried, *Forensic Science: Bloodspatter Analysis*, 36 CRIM. L. BULL. 509, 509 (2000) ("In the view of some commentators, the 'seminal event in the history of this forensic science' was an attempted use of bloodspatter analysis in the famous prosecution of Dr. Sam Sheppard for the murder of his wife Marilyn in Cleveland, Ohio."); BAILEY, *supra* note 45, at 85 ("The real weakness of the defense in Sam's first trial had been his attorneys' inability to gather evidence. This time, we had the testimony of Dr. Paul Leland Kirk, the criminologist who had examined Dr. Sheppard's bedroom."); McCarty, *supra* note 34, at 10 ("In police laboratories around the world today, Kirk's post-trial investigation of the Sheppard scene in 1955 is still hailed as the seminar event in the history of forensic science.").

<sup>50</sup>THORWALD, *supra* note 43, at 148 ("But Corrigan made no serious effort to procure access to Sheppard's house for the defense.").

<sup>51</sup>Even before the civil trial, some of Kirk's conclusions were questioned. See THORWALD, *supra* note 43, at 153 ("This led Kirk to a further conclusion which at first seemed to verge dangerously upon pure speculation. He asked himself: Could the bloody contact spot on the wardrobe door have come from the murderer, who might have been trying to silence the struggling victim with his right hand and been bitten badly in the process?"); *id.* at 154 ("Nevertheless, he was somewhat exceeding his authority when he capped this section of his report with the sentence: 'These differences are considered to constitute confirmatory evidence that the blood on the large spot [on the door] had a different individual origin from most of the blood in the bedroom.' He may have been right in his belief that this blood spot pointed to the presence of an unknown third person; but he was also crossing the boundary of certainties and exposing himself to possible attacks which could endanger the value of his work as whole.").

<sup>52</sup>See Paul C. Giannelli, *Criminal Discovery, Scientific Evidence, and DNA*, 44 VAND. L. REV. 791 (1991) (discussing the shortcomings of current discovery procedures).

as opposed to a sexual assault, and whether there were signs of “staging.” This type of testimony is of very recent origin.<sup>53</sup>

If this was a criminal case tried today, few defendants could afford such experts. The DNA expert, who provided free services in the Sheppard case, told a journalist that he would have charged \$150,000 in an ordinary case.<sup>54</sup> Most criminal defendants are indigents—as many as eighty-five percent in some jurisdictions.<sup>55</sup> In *Ake v. Oklahoma*,<sup>56</sup> the Supreme Court required that indigent defendants have access to experts, but there is some indication that *Ake* is not being liberally construed.<sup>57</sup>

#### IV. CONCLUSION

Because my time is running out, let me summarize my thoughts. First, I think “skillful investigation” (i.e., scientific evidence) offers a better approach to crime detection than eyewitness identifications or confessions. But we need to allocate more funds to and require stricter testing of crime laboratories, medical examiners, and coroner systems, which are often dangerously underfunded.

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<sup>53</sup>*E.g.*, *Pennell v. State*, 602 A.2d 48 (Del. 1991) (permitting expert to review three murders and express the opinion that they were all committed by the same person); *State v. Code*, 627 So. 2d 1373 (La. 1993) (upholding conviction for four murders, in which there were striking similarities including matching latent fingerprints, similar electrical cord and duct tape, use of a unique handcuff ligature, distinctive knots, the victims were stabbed or strangled multiple times, and the coroner’s reports and testimony identified the various signature elements of the murders; expert testified that these similarities demonstrated “signature crimes” of the defendant); *State v. Fortin*, 745 A.2d 509 (N.J. 2000) (excluding “linkage analysis” in an attempt to connect two different crimes). *See generally* JOHN E. DOUGLAS ET AL., *CRIME CLASSIFICATION MANUAL: A STANDARD SYSTEM FOR INVESTIGATING AND CLASSIFYING VIOLENT CRIMES* (1992); STEPHEN G. MICHAUD & ROY HAZELWOOD, *THE EVIL THAT MEN DO: FBI PROFILER ROY HAZLEWOOD’S JOURNEY INTO THE MINDS OF SEXUAL PREDATORS* (1998); Donald Q. Cochran, *Alabama v. Clarence Simmons: FBI “Profiler” Testimony to Establish an Essential Element of Capital Murder*, 23 *LAW & PSYCHOL. REV.* 69 (1999).

<sup>54</sup>*See* McCarty, *supra* note 34, at 14 (“If Tahir were to charge his standard expert’s fee for outside contract work, his final bill might approach \$150,000. But for Sheppard, he made an exception.”).

<sup>55</sup>YALE KAMISAR ET AL., *MODERN CRIMINAL PROCEDURE* 27 (8th ed. 1994) (“The most complete national survey estimated the overall felony indigency rate at 48%, and statistics from particular urban jurisdictions suggest rates in the 70-85% range.”).

<sup>56</sup>470 U.S. 68 (1985). *Ake*’s attorney requested a psychiatric evaluation at state expense to prepare an insanity defense. The trial court refused, and although insanity was the only contested issue at trial, no psychiatrist testified on this issue.

<sup>57</sup>*See* KELLY & WEARNE, *TAINING EVIDENCE: INSIDE THE SCANDALS AT THE FBI CRIME LAB* 27 (1998) (“[E]xperts cost money. The vast majority of defendants’ don’t have it... The result has been what some experts have termed ‘an economic presumption of guilt.’”); STEPHEN A. SALTZBURG & DANIEL J. CAPRA, *AMERICAN CRIMINAL PROCEDURE* 802 (6th ed. 2000) (“Generally speaking the courts have read *Ake* narrowly, and have refused to require appointment of an expert unless it is absolutely essential to the defense.”). *See also* GIANNELLI, *supra* note 7, at ch. 4 (discussing right to defense experts).

Second, there should be more open discovery concerning experts in criminal cases. Comprehensive reports should be required, and expert depositions, or at least written interrogatories, should be permitted.

Third, the defense must have access to experts. Attorneys cannot understand scientific evidence unless they have experts available to assist them in evaluating such evidence.

Thank you.