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No Longer the Right to Remain Silent: Cross-examining Forensic Analyst Testimony

I. INTRODUCTION

Forensic evidence helps solve crimes and is a fascination among the general public. Popular television programs such as CSI and NCIS expose the public to many of these investigative tools and give them a “mythic infallibility” in the eyes of juries. Many refer to this as the “CSI effect.” Forensic evidence can identify a suspect or even vindicate an accused. The Innocence Project, for example, has used DNA evidence to exonerate wrongfully convicted defendants and save them from death row convictions and life sentences. Sadly, some of these convictions originally occurred as a result of other, faulty forensic evidence.

A two-pronged approach helps combat faulty forensic evidence. First, accused persons have the right to confront testimony against them by questioning the laboratory technicians who perform the

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research. Second, the forensic scientist community has engaged in increased efforts to address problems facing the field of forensic research and practice. The Supreme Court helped further these efforts with its holding in *Melendez-Diaz v. Massachusetts*, and in doing so, it also sent a message to the forensic community that technology must continue to improve to justify the use of forensic evidence.

In *Melendez-Diaz*, the Court correctly extended the Confrontation Clause to forensic evidence and held that an accused must have an opportunity to cross-examine forensic analysts because this evidence is testimonial in nature. This Note begins in Part II by discussing prior cases and developments related to the Confrontation Clause that led to the Court’s holding in *Melendez-Diaz*. Part III examines the facts, procedural history, and holding in *Melendez-Diaz*. Part IV then analyzes the reasoning the Court relied upon to extend the Confrontation Clause to provide defendants with an opportunity to cross-examine laboratory technicians. Part V examines recent critiques of forensic evidence and explains why the Court was correct in requiring laboratory technicians to testify regarding forensic science. Part VI provides a conclusion.

II. CONTEXT AND BACKGROUND

The Confrontation Clause requires that the accused have the opportunity to cross-examine testimonial statements made against him in court. The decision in *Melendez-Diaz* was the result of several cases gradually expanding the type of evidence that qualifies as “testimonial” for Confrontation Clause purposes. *Ohio v. Roberts*, for instance, set forth the standard for interpreting the Confrontation Clause—a standard that was extended in *Crawford v. Washington*. The Court then further defined what qualified as testimony and required cross-examination in *Davis v. Washington*. With *Melendez-Diaz*, the Court continued the gradual expansion of the types of testimony that fall under the Confrontation Clause.

6. Id. at 2531–32.
A. “Indicia of Reliability”

In Ohio v. Roberts, the defendant was charged with forgery of a check and possession of stolen credit cards belonging to his wife. At the preliminary hearing, the defendant’s daughter was called to testify. The defense attempted to elicit testimony from the daughter corroborating the defendant’s version of events, but failed to do so. As a result, the case proceeded to trial.

Rather than calling the daughter at trial, the state offered the transcript of her preliminary hearing testimony. The defense objected and argued that her absence, and the fact that the defendant had no opportunity to cross-examine her testimony at trial, was a violation of the defendant’s constitutional rights.

Before the trial, the state had attempted to serve the defendant’s daughter with multiple subpoenas left at her parents’ residence, but it was not clear if she received them. By that time she had already left the state and lost contact with her parents. At trial, the prosecution made no attempt to locate the daughter, nor did they show the court that the daughter “would be absent because of unavailability.”

The Court in Roberts affirmed the state court’s holding that when a hearsay declarant is not available for cross-examination at trial, the statement can bypass the Confrontation Clause if it “bears adequate ‘indicia of reliability.’” The Court further stated that “[i]n other cases, the evidence must be excluded, at least absent a showing of particularized guarantees of trustworthiness.” This standard lasted for more than twenty years until the Court reexamined the issue in Crawford v. Washington.

12. Id.
13. Id.
14. Id. at 59.
15. Id.
16. Id.
17. Id.
18. Id. at 59–60.
19. Id. at 60.
20. Id. at 66.
21. Id.
B. The Confrontation Clause

The Court laid out the framework for applying the Confrontation Clause in several recent watershed cases, including Crawford. The Confrontation Clause is contained in the Sixth Amendment and requires that “[i]n all criminal prosecutions, the accused shall enjoy the right . . . to be confronted with the witnesses against him.”22 In 2004, for example, the Court decided Crawford v. Washington and further produced guidelines concerning the admission of previously admitted hearsay statements. Crawford reversed the rationale set forth in Roberts and held that reliability does not adequately replace the opportunity for cross-examination required by the Sixth Amendment.

1. Crawford v. Washington

In Crawford, the defendant was charged with assault and attempted murder as a result of stabbing another man whom he believed had attempted to rape his wife.23 The defendant’s wife was present when the defendant stabbed the victim.24 After arresting the defendant, the police spoke with the defendant’s wife and obtained a statement from her regarding the events.25 At trial, the State used this recorded statement rather than live testimony against the defendant because the wife invoked the marital privilege.26 The state court determined that her statements were reliable enough to be used at trial and overcome any hearsay problems.27 The State subsequently convicted the defendant based upon the statements of the wife to the police.28 While the state court upheld the conviction, the Supreme Court reversed on appeal.29

The petitioner in Crawford had urged the Court to reconsider the reasoning of Roberts,30 arguing that the Roberts test “stray[ed] from the original meaning of the Confrontation Clause.”31 In

22. U.S. CONST. amend. VI.
24. Id.
25. Id.
26. Id. at 40.
27. Id. at 38.
28. Id. at 40–41.
29. Id. at 41.
30. Id. at 42.
31. Id.
coming to its determination, the Court spent a great deal of time explaining the history and development of the Confrontation Clause. Justice Scalia, a formalist, authored the opinion and explained that the Roberts test misinterpreted the original meaning of the Confrontation Clause. The Court in Crawford held that the criminally accused have a right to confront and cross-examine recorded statements of witnesses given to the police, regardless of the court’s opinion about the testimony’s reliability. For testimonial statements, “the only indicium of reliability sufficient to satisfy constitutional demands is the one the Constitution actually prescribes: confrontation.”

2. Davis v. Washington

The Davis Court further defined the characteristics of “testimony” for Confrontation Clause purposes. Under Crawford, statements of a testimonial nature cannot be used in court unless a party has an opportunity to cross-examine the declarant. In Davis, the Court further delineated what constitutes a testimonial statement and held that statements testimonial in nature or intent require cross-examination to satisfy the Confrontation Clause. In Davis, the statements at issue involved comments made during the recording of a telephone call made to 911. At the time of the 911 call, the caller had just been attacked and identified her boyfriend as the assailant. The boyfriend was subsequently found and charged with a felony violation of a domestic no-contact order in place at the time. Although the victim was apparently available to testify, the court admitted the recording of her 911 call over the defendant’s objection. The Washington State Supreme Court and the U.S. Supreme Court both upheld the conviction.

The Court reasoned that to determine whether a statement deserves Confrontation Clause protection, courts must first

32. Id. at 60.
33. Id. at 68–69.
34. Id.
36. Id. at 817–18.
37. Id.
38. Id. at 818.
39. Id. at 819.
40. Id.
determine whether the statement is “testimonial.” 41 The Court had previously set forth “various formulations” in Crawford, but declined to endorse any of them in Davis. 42 Instead, the Davis Court attempted to provide a non-exhaustive description of testimonial versus non-testimonial statements 43: “Statements are nontestimonial when made in the course of police interrogation under circumstances objectively indicating that the primary purpose of the interrogation is to enable police assistance to meet an ongoing emergency.” 44 The Court concluded that statements in 911 calls were testimonial “when the circumstances objectively indicate that there is no such ongoing emergency, and that the primary purpose of the interrogation is to establish or prove past events potentially relevant to later criminal prosecution.” 45 Thus, in Davis, the Court held that the statements made to the 911 operator in this portion of the call were not testimonial in nature, but rather were made pursuant to an ongoing emergency. 46 Accordingly, the statements did not require the type of Confrontation Clause protections afforded testimonial statements.

III. MELENDEZ-DIAZ V. MASSACHUSETTS

The reasoning of Crawford and Davis proved critical in Melendez-Diaz. Melendez-Diaz appeared before the Court in 2009, five years after Crawford and three years after Davis. The Melendez-Diaz Court held that forensic affidavits are testimonial in nature and require Confrontation Clause protections for an accused. 47

41. See id. at 821–22.
43. See Davis, 547 U.S. at 822 (explaining that the Court did not even want to “attempt[] to produce an exhaustive classification of all conceivable statements—or even all conceivable statements in response to police interrogation—as either testimonial or non-testimonial”).
44. Id.
45. Id.
46. Id. at 828 (“This is not to say that a conversation which begins as an interrogation to determine the need for emergency assistance cannot, as the Indiana Supreme Court put it, ‘evolve into testimonial statements,’ 829 N.E.2d, at 457, once that purpose has been achieved.”). Both the Supreme Court and the Washington Supreme Court agreed that although some of the statements made during the latter portion of the 911 call might have been testimonial in nature, in this case “their admission was harmless beyond a reasonable doubt.” Id. at 829.
A. Facts

In 2001, Boston police received a tip that a Kmart employee, Thomas Wright, was “engage[d] in suspicious activity” while at work.\(^{48}\) The suspicious employee would take breaks and leave for the parking lot shortly after receiving phone calls at work.\(^{49}\) Outside, a blue sedan would meet Wright briefly, after which Wright would return to work.\(^{50}\) Police subsequently surveilled the parking lot and observed the suspicious behavior.\(^{51}\) As Wright exited the car, an officer detained and searched him.\(^{52}\) The officer found four clear plastic baggies “containing a substance resembling cocaine.”\(^{53}\) As a result, the officer signaled for the assisting officers to arrest the other two occupants of the vehicle, one of whom was the defendant Melendez-Diaz.\(^{54}\)

All three suspects were placed in the back of the same police car.\(^{55}\) During the drive to the station, the passengers fidgeted and moved around in the back of the car.\(^{56}\) The police searched the vehicle after dropping the suspects off at the station and found nineteen other small plastic baggies containing a substance similar to that contained in the four baggies initially discovered by the police.\(^{57}\) As a result, prosecutors charged Melendez-Diaz with distributing cocaine and trafficking cocaine “in an amount between 14 and 28 grams.”\(^{58}\) When the prosecution entered the baggies into evidence, “[i]t also submitted three ‘certificates of analysis.’”\(^{59}\) These certificates contained the laboratory results concerning the weight and identity of the substance contained in the baggies.\(^{60}\) Pursuant to Massachusetts state law, the analysts at the state forensic laboratory signed the certificates and had them notarized.\(^{61}\)

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\(^{48}\) *Id.* at 2530.
\(^{49}\) *Id.*
\(^{50}\) *Id.*
\(^{51}\) *Id.*
\(^{52}\) *Id.*
\(^{53}\) *Id.*
\(^{54}\) *Id.*
\(^{55}\) *Id.*
\(^{56}\) *Id.*
\(^{57}\) *Id.*
\(^{58}\) *Id.*
\(^{59}\) *Id.* at 2530–31.
\(^{60}\) *Id.* at 2531.
\(^{61}\) *Id.*
At trial, Melendez-Diaz argued that the admission of the certificates violated his rights under the Confrontation Clause as set forth in *Crawford*. Melendez-Diaz argued that the Confrontation Clause “required the analysts to testify in person.” The trial court overruled the objection and stated that the certificates were “prima facie evidence of the composition, quality, and the net weight of the narcotic . . . analyzed” pursuant to state law.

**B. Procedural History**

The jury subsequently convicted Melendez-Diaz. On appeal, Melendez-Diaz raised multiple issues, among them, “that admission of the certificates violated his Sixth Amendment right to be confronted with the witnesses against him.” Relying on Massachusetts state law and case history, the court rejected this claim. The Massachusetts Court of Appeals believed that “authors of certificates of forensic analysis are not subject to confrontation under the Sixth Amendment.” The state Supreme Judicial Court denied review.

**C. Holding**

In a 5-4 split, the Supreme Court held that the lower courts erred in permitting the prosecution to use out-of-court certificates to prove its case without providing the defendant an opportunity to cross-examine the lab technicians. The Court stated that resolving this case “involve[d] little more than the application of our holding in *Crawford***.

These certificates fell within the class of testimonial statements covered by the Confrontation Clause. The state created the certificates “for the sole purpose of providing evidence against a...
Thus, the affidavits qualified as a “witness” and “testimony” against Melendez-Diaz for Confrontation Clause purposes, and Melendez-Diaz therefore had a constitutional right to confront the witness through cross-examination.\(^{73}\)

IV. ANALYSIS

A. The Court Was Correct in Extending Crawford to Lab Analysts

The majority correctly and persuasively argued against the positions adhered to by the respondents and the dissent. In striking down these counterarguments, the majority clearly explained that certificates and affidavits are testimonial in nature; they do not differ from “conventional” witnesses; they do not fit under any current hearsay exceptions; and that the dissent over-exaggerated the potential burden on the system.

1. Certificates are testimonial and accusatory

One of the first issues the Court addressed concerned whether certificates, or affidavits, qualify as testimonial statements. The Court correctly held that affidavits, or certificates, “fall within the ‘core class of testimonial statements’” that are covered by the Confrontation Clause.\(^{74}\)

Lab technicians prepare these affidavits for use at trial against the defendant. Under the reasoning of Crawford, the defendant must have an opportunity to cross-examine the analyst regarding the affidavit. More directly, the affidavits serve an evidentiary purpose and are not part of an ongoing emergency like the identification made in Davis. The Melendez-Diaz Court even pointed to the actual affidavit itself and the Massachusetts state law provision, which stated that “the sole purpose of the affidavits was to provide ‘prima facie evidence of the composition, quality, and the net weight’ of the analyzed substance.”\(^{75}\) Technicians sign and swear that the information contained in lab reports is accurate. The very nature of this act signifies that the technician is testifying that the information

\(^{72}\) Id. at 2539.

\(^{73}\) Id. at 2532.

\(^{74}\) Id. (referring to White v. Illinois, 502 U.S. 346, 365 (1992)).

\(^{75}\) Id. (quoting MASS. GEN. LAWS ch. 111, § 13 (2003)).
contained in the certificates is true, making the affidavit testimonial just like any other conventional testimony.

Although the respondent argued that—unlike conventional testimony—the forensic evidence is objective and not accusatory, the Court emphasized that statements do not have to be accusatory to qualify as testimony subject to the Confrontation Clause.76 Conventional witnesses, for example, often testify concerning non-accusatory information such as a description of a crime scene, their personal observations, and other details of a crime. A lab technician’s statements regarding evidence found at a crime scene are no different than statements provided by a “conventional” witness.

2. Scientific report certificates are not neutral and can be prone to distortion or manipulation

The Court correctly reasoned that laboratory report certificates are testimonial in nature and thus require that the accused have an opportunity to cross-examine those who prepare them. The dissent and the respondent incorrectly argued that these affidavits are not like conventional witness testimony and thus should not be subject to the Confrontation Clause because the evidence they are based on is not “prone to [the same] distortion or manipulation” as is possible when “recounting historical events.”77 The Court correctly dismissed this reasoning since it was the same logic that had been overturned in Roberts. The “trustworthiness” of the testimony is no longer a factor in determining whether testimony should be subject to the Confrontation Clause.78 The respondent and the dissent both gave forensic evidence too much credit. Respondents incorrectly argued that scientific reports are not like conventional testimony because they are “neutral” and not subject to the same errors as conventional live witnesses.79

The dissent claimed that confrontation of these analysts by a defendant “adds nothing.”80 Beyond the simple fact that allowing confrontation is a constitutional mandate, failure to allow confrontation could legitimize the mistaken belief some jurors hold

76. Id. at 2533.
77. Id. at 2536.
78. See id. at 2532–33, 2536.
79. Id. at 2536.
80. Id. at 2549 (Kennedy, J., dissenting).
that all forensic evidence is equally infallible. Arguments such as this perpetuate the myth that some in the media refer to as the “CSI effect.”81 Instead, the majority recognized that forensic evidence is not as objective as the respondent and dissent made it sound.82 Forensic evidence can easily be corrupted or manipulated by lab technicians who are in a rush or who are trying to make the evidence fit the suspect.83

The constitutional principle of confrontation provides a defendant with an opportunity to mitigate the possible effects of technicians making mistakes, using improper techniques, or holding biases. Cross-examination allows a defendant to question a technician and ensure that the evidence against him has been tested as accurately as possible. This is not meant to imply that lab technicians generally are corrupt or make mistakes, but it only takes one lab technician with ulterior motives to produce a report leading to the wrongful conviction of an innocent defendant.84 Cross-examination provides an opportunity to expose some of these potential problems.

Additionally, public perception seems to view forensic evidence and science as one and the same. As discussed further in Part IV, many of these forensic techniques are not as reliable as conventional scientific evidence (such as DNA evidence) and have not been equally subjected to the rigors of the scientific process. Given the errors that can occur during the gathering or testing of forensic evidence, the Court correctly extended the reasoning of Crawford to cover forensic evidence and lab technicians’ affidavits.

3. Confrontation extends beyond “conventional” witnesses

The dissent and the respondent incorrectly argued that the Confrontation Clause was meant to protect against the type of testimony “notoriously used at the trial of Sir Walter Raleigh” and not lab technicians.85 Although affidavits and lab technicians are not “conventional” witnesses, the majority best explained the

81. See supra note 2 and accompanying text.
82. Melendez-Diaz, 129 S. Ct. at 2536.
83. See infra Part V.
85. Melendez-Diaz, 129 S. Ct. at 2534.
immateriality of this distinction: “[The Raleigh] case identifies the core of the right to confrontation, not its limits. The right to confrontation was not invented in response to the use of the *ex parte* examinations in *Raleigh’s Case*.”

Permitting the presentation of forensic evidence against a defendant without an opportunity to cross-examine the technician who prepared the report can lead to wrongful convictions and modern day Raleighs. The dissent listed three ways that conventional witnesses differ from lab affidavits; however, none of these three reasons should exempt affidavits from cross-examination.

a. Analysts were not “near-contemporaneous.” In an apparent attempt to resurrect the Roberts standard, the dissent argued that contemporary witnesses are less trustworthy because they tend to be further removed from the events than lab technicians. Conventional witnesses “may have misperceived or misremembered,” whereas a lab technician makes “a contemporaneous observation [and] need not rely on memory; he or she instead reports the observations at the time they are made.” Using reliability as a reason to exempt testimony from cross-examination was rejected, however, by the Court in *Crawford*.

Even if a court did factor reliability into the determination, a lab analyst does not always prepare the affidavits immediately after performing the test. In *Melendez-Diaz*, for instance, the analysts prepared the affidavits a week after they performed the tests. The dissent failed to explain what limits differentiate “near-contemporaneous” from events too far in the past. Regardless of where one attempts to draw a line, reliability as to the memory of events should not come into play when determining whether it requires cross-examination.

Analysts make mistakes and may use controversial methods to obtain results. Simply because the analyst makes the affidavit shortly after using improper methods does not mean she is more reliable than a conventional witness. The core right to confrontation allows for the accused to cross-examine testimony against him. The accused

86. Id.
87. Id. at 2551 (Kennedy, J., dissenting).
88. Id.
89. Interestingly, Justice Kennedy was the only Justice who switched from the majority in *Crawford* to the dissent in *Melendez-Diaz*. 
has a right to question a witness regarding bias and any other reasons the lab results might be tainted. And while confrontation is not the only way to challenge the results of a forensic test, it is one way specifically provided by the Constitution.

The Court stated that “[c]onfrontation is one means of assuring accurate forensic analysis.”90 An honest analyst has nothing to fear in court and will likely testify truthfully regarding her methods and results because she has nothing to hide. However, a dishonest analyst may reconsider her fraudulent analysis. Requiring lab technicians to testify may reduce the number of fraudulent cases. An analyst who knows she will be confronted with the results and be prosecuted for perjury may likely think twice before fabricating results.

Moreover, confrontation can protect against fraudulent as well as incompetent analysis. Requiring an analyst to testify and qualify as an expert witness can help “weed out” some of the improper forensic evidence.91 One study showed that invalid forensic testimony contributed to wrongful criminal convictions in as many as 60 percent of the cases.92 The Court also quoted Professor Pamela Metzger who stated that the “legal community now concedes, with varying degrees of urgency, that our system produces erroneous convictions based on discredited forensics.”93

Consensus within the legal field and among the public continues to be elusive, but many recognize that all forensic evidence is not created equal. Subjectivity and bias can come into play. In light of these considerations, and as the Court recognized, it is not sound to base decisions about the right to confront analysts on the basis that their statements may be made in closer temporal proximity to the actual observation than those of ordinary witnesses.

b. Analysts “observe neither the crime nor any human action related to it.” The dissent argued an analyst differs from a conventional witness because “[o]ften, the analyst does not know the defendant’s identity” nor does she have any knowledge of the

90. Id. at 2536 (majority opinion).
91. See id. at 2537.
defendant’s guilt.94 However, because of the subjectivity involved in some of the forensic techniques, analysts may suppress or manipulate evidence to alleviate the pressures put on them by investigative detectives.95 A British researcher, for example, has performed studies showing that “fingerprint examiners can be influenced by what else they know about a case.”96 Some of his experiments even resulted in “the same examiner . . . com[ing] to different conclusions about the same fingerprint, if the context is changed over time.”97 Evidence susceptible to this degree of subjectivity should be subject to cross-examination by the accused.

Moreover, the dissent did not adequately expound upon this concept of analysts being adequately removed in time. Simply because a witness at trial did not observe the crime, for instance, does not make him an unconventional witness. Expert witnesses have long been used at trial, and the Court has never exempted expert witnesses from Confrontation Clause requirements merely because they did not “observe . . . the crime nor any human action related to it.”98 This should not, therefore, be a reason to exempt lab analysts.

c. Conventional witnesses respond to interrogation. Lastly, Justice Kennedy apparently assumed that lab affidavits are objective and non-adversarial. Justice Kennedy offered the distinction that unlike lab technicians, the Constitution only requires that an accused be permitted to confront conventional witnesses and their out-of-court statements that are adversarial to the accused.99 This argument ignored the subjectivity that comes with some forensic analysis techniques.100

Throughout his dissent, Justice Kennedy appears to have based his analysis on the faulty assumption that all forensic evidence has passed the rigors of scientific analysis and is therefore not subject to significant error. But the inherent nature of some forensic analysis requires the analyst to draw her own conclusions rather than merely

94. Id. at 2553 (Kennedy, J., dissenting).
95. See NAS REPORT, supra note 84, at 44–48.
97. Id.
98. Melendez-Diaz, 129 S. Ct. at 2552 (Kennedy, J., dissenting).
99. Id.
100. See infra Part V.
printing out the results of a chemical analysis done by a computer. Faulty forensic evidence has contributed to too many wrongful convictions to assume that it is scientific, objective, and non-adversarial.\textsuperscript{101}

Forensic evidence may be volunteered, but volunteered statements can be deemed testimonial—as those provided to the police in \textit{Davis} were.\textsuperscript{102} Although police may have questioned the witness, the accused still has a right to confront anyone making an accusation against him in court, regardless of whether the witness’s statements came voluntarily or under subpoena. The Court stated that these prior statements concerned “establishing the facts of a past crime” and clearly required confrontation protection.\textsuperscript{103} Lab analysts perform tests in order to establish facts of past crimes as well, and the accused should receive the same confrontational opportunities for this type of evidence.

4. Lab affidavits do not fit under the business, official, or public records exception

The dissent attempted to compare lab result affidavits to other types of documents that fit under the business or public records hearsay exceptions. However, this line of reasoning fails when one considers that those exceptions are meant to allow the introduction of documents that were primarily prepared for non-court use. Lab technicians prepare affidavits for the primary purpose of use as testimony against a defendant at trial. Allowing affidavits to come in under one of these exceptions again takes a detour around the constitutional right of confrontation.

The dissent incorrectly argued that the Framers did not intend to require confrontation for these unconventional witnesses. Although lab analysts did not exist at the time, the dissent stated that forensic lab analysts are comparable to copyists.\textsuperscript{104} The Court has long allowed parties to introduce into evidence copies of official documents without requiring the copyist to testify. However, in comparison to copyists who only make manual facsimiles of their product, the work of a lab analyst introduces far more subjectivity. In

\textsuperscript{101} See supra note 4.
\textsuperscript{103} Id.
\textsuperscript{104} Melendez-Diaz, 129 S. Ct. at 2552–53 (Kennedy, J., dissenting).
other words, forensic evidence analysis requires analysts to make logical educated guesses.

As this Note further discusses in Part IV, forensic analysis requires much more subjective input than many would at first imagine. Much like many juries, the dissent appears to have fallen victim to the “CSI effect.”

5. Subpoena analyst under Compulsory Process Clause or state statute

The Compulsory Process Clause and Confrontation Clause serve two different purposes in dictating which witnesses a defendant may call. The Confrontation Clause provides a defendant with the opportunity to confront witnesses “against” him. Conversely, the Compulsory Process Clause permits a defendant to call witnesses “in his favor.” The majority opinion clearly stated that all witnesses fit within one of these two categories. The majority rejected the attempt by the dissent to carve out a third category of witnesses helpful to the prosecution, but not qualifying as witnesses “against” the accused. The dissent stated that defendants can already subpoena analysts to testify under the Compulsory Process Clause. The majority rejected this argument by stating that it “is no substitute for the right of confrontation. Unlike the Confrontation Clause, those provisions are of no use to the defendant when the witness is unavailable or simply refuses to appear.”

6. Burden on the system

a. Burden is no reason to ignore a defendant’s constitutional protection. The Constitution is not an efficiency guide that values efficiency over the rights of individuals. Although some situations may call for a suspension of some constitutional rights—such as a suspension of habeas corpus, searches without a warrant, or restrictions on free speech—the burden of making a lab technician appear in court does not justify denying a criminal defendant the constitutional right to confront the technician’s testimony against him.

105. See supra note 2.
106. U.S. CONST. amend. VI.
107. Id.
108. See Melendez-Diaz, 129 S. Ct. at 2533–34.
109. Id. at 2540.
b. Majority doubts implications expressed by respondent and dissent. Although the dissent laid out dire warnings concerning the floodgates Melendez-Diaz may open, some states have already instituted similar confrontation requirements without crippling their justice systems. Specifically, nine states have required technicians to testify as a result of Crawford.110 Mississippi began requiring lab technicians to testify in order to avoid Confrontation Clause violations in 1985 as a result of a Mississippi Supreme Court decision.111 The court stated that “allow[ing], without the consent of the defendant, this essential element to be proven solely by a certificate of the analyst impermissibly lessens the constitutionally required burden which is on the state.”112

The Melendez-Diaz dissent believed that although some states have provided the accused with a right to confrontation, the full effects of this practice have not yet fully affected the system. “These States have not yet been subject to the widespread, adverse results of the formalism the Court mandates today.”113 Justice Kennedy did not explain the portents that apparently provided this long term foreseeability.

In response to the argument that the Melendez-Diaz requirement would overwhelm judicial systems, subsequent observers have detailed that some states already require testimony by lab technicians.114 In describing these states, the petitioner in Briscoe v. Virginia stated that states requiring lab technician testimony have “shoulder[ed] their burden . . . . [T]hese jurisdictions still have functioning criminal justice systems: drug cases are prosecuted, guilty pleas are entered, and trials at which forensic analysts testify in person for the prosecution are had.”115

If courts continue to permit unconventional evidence in criminal cases, the Court should not permit this unconventional testimony to skirt the rights guaranteed in the Constitution merely because it will

110. See id. at 2541 n.11.
111. See Barnette v. State, 481 So. 2d 788 (Miss. 1985).
112. Id. at 791.
113. Melendez-Diaz, 129 S. Ct. at 2558 (Kennedy, J., dissenting).
114. See infra Part V.D.
cost the state more to support its evidence. The dissent believed the costs imposed by requiring technicians to testify would lead to the guilty going free and an abuse of “Melendez-Diaz objections” by zealous defense attorneys. However, nothing comes free. These same objections could be raised against other types of constitutional protections, such as jury trials. As long as courts allow analysts to present subjective forensic evidence testimony, the Court should continue to allow a defendant to cross-examine the preparer of the testimony.

c. Resolving which laboratory technician testifies. The dissent provided numerous scenarios involving multiple analysts involved in one forensic test and considered which analyst should testify.116 These are legitimate concerns that the Court should address and for which it should provide guidelines. However, the fact that such issues remain unclear should not prevent application of the principle.

State courts have operated in this void by imposing different rules concerning which analyst must testify to satisfy the Sixth Amendment. California courts, for example, have generally held that testimony by a technician other than the one who prepared the report violated the defendant’s Sixth Amendment rights.117 On the other hand, Mississippi does not require the technician who performed the tests to testify, but does require someone from the lab to do so.118 The Court did not address this in Melendez-Diaz and again missed the opportunity to provide a procedure for analyst testimony in Briscoe v. Virginia.119

The dissent also mentioned chain of custody and authentication problems involved with requiring analyst testimony. The authentication argument contends that it would require the copyist

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116. See Melendez-Diaz, 129 S. Ct. at 2544–45 (Kennedy, J., dissenting).
117. See, e.g., People v. Dungo, 98 Cal. Rptr. 3d 702 (Cal. Ct. App. 2009) (Sixth Amendment violation where a pathologist testified in reliance on an autopsy report that he himself did not create); People v. Carruth, 2009 WL 2564832 (Cal. Ct. App. Aug. 19, 2009) (unpublished) (Sixth Amendment violation where a forensic toxicologist testified about another forensic toxicologist’s curriculum vitae and about the nature of the lab report the other toxicologist generated); People v. Rutterschmidt, 98 Cal. Rptr. 3d 390 (Cal. Ct. App. 2009) (no Sixth Amendment violation where the director of the lab testified based on toxicology reports prepared by other analysts).
118. See Melendez-Diaz, 129 S. Ct. at 2558 (Kennedy, J., dissenting). Kennedy believes that Mississippi's practice possibly may not reconcile with the Melendez-Diaz holding.
119. See infra Part V.D.
to testify. Again the dissent improperly compared a copyist to an analyst. Authentication should not be an issue when one realizes the differences between an analyst who produces a document containing subjective findings for court and someone making a facsimile of the report.

The dissent also argued that the decision by the majority could be extended to require each person in the chain of custody to testify, which has never been the case for police officers. Although it remains unclear which technician should testify when multiple technicians take part in the testing, a reductio ad absurdum argument should not refute an argument yet to be fully defined.

The decision in Melendez-Diaz may create some additional burdens on laboratory technicians, but it ensures that the government meets its constitutionally required burden. Inefficiency should not excuse the State from providing defendants with the opportunity to confront witnesses against them. The infamous trial of Sir Walter Raleigh influenced many jurisdictions throughout the world. The justice system must avoid denying defendants the right to confront the witnesses against them in the same manner in which the Crown denied the right to Sir Walter Raleigh.

V. THE NEW WITNESS: FORENSIC SCIENCE

The Melendez-Diaz majority also correctly relied on the findings of the National Academy of Sciences’ (“NAS”) Report throughout its opinion. The findings of the committee revealed a system in need of overhaul. In order to combat forensic mistakes, the Court reasoned that “[c]onfrontation is one means of assuring accurate forensic analysis.”

Forensic evidence can easily turn a trial against or in favor of a defendant. Presenting forensic reports alone without an expert can incorrectly lead a layperson on the jury to assume its truthfulness. The NAS Report stated that “[t]he fact is that many forensic tests . . . have never been exposed to stringent scientific scrutiny.”

This does not mean forensic evidence should be prohibited, nor does it imply that forensic evidence is inherently faulty. Instead, this fact merely highlights that the Court’s decision to require a laboratory technician to testify is justified considering the possibility of faulty

120. Melendez-Diaz, 129 S. Ct. at 2536.
121. NAS REPORT, supra note 84, at 42.
A. National Academy of Sciences Report

In November 2005, Congress authorized “the National Academy of Sciences [‘NAS’] to conduct a study on forensic science, as described in the Senate report.” 123 The Senate Report instructed the committee to research and report on several areas of forensic science. 124 In the fall of 2006, the NAS established a committee composed of “members of the forensic science community, members of the legal community, and a diverse group of scientists.” 125

The Senate did not ask the Academy to investigate DNA evidence because DNA has already passed scientific scrutiny and analysis. 126 Other forms of forensic evidence, however, have not undergone the same rigorous scientific scrutiny as DNA, 127 even though they can have a similar impact in a criminal trial. Thus, the report focused on non-DNA forensic evidence and the crime laboratories performing the analysis.

The report revealed that crime laboratories and the methods used for forensic evidence have “serious problems.” 128 The consistency of the testimony and evidence presented to the members of the committee “surprised” them. 129 To address these problems, the committee has called for a new federal entity to deal with the problems highlighted in the report and institute the recommendations made therein. 130

The proposed “National Institute of Forensic Science” would address many of the problem areas that existing federal agencies are not adequately equipped to handle. 131 The report calls for the new

122. See id. at 4, 37.
125. NAS REPORT, supra note 84, at 2.
127. See NAS REPORT, supra note 84, at 8.
128. Id. at xx.
129. Id.
130. Id. at 18–19.
131. Id.
entity to be rooted in science and to develop strong ties to forensic labs and organizations throughout the country. The agency would be separate from any law enforcement agencies and would be willing to push for improvements.

The report received a mixed response from the forensic community, but some welcomed the critique. Lawrence Kobilinsky, chairman of the department of sciences at John Jay College of Criminal Justice in New York, stated that “the report was ‘basically saying what many of us have been saying for a long time... [that] [t]here are a lot of areas in forensics that need improvement.’”

Elaine Pagliaro, a Connecticut State Police analyst, called the recent scrutiny “good.” “It’s important for the public to have a realistic expectation of what the science can do.”

B. Problems with Forensic Science

The Report refers to the field of forensic evidence as a “fragmented system” with “serious problems” and “deficiencies.” The committee made thirteen recommendations for improvement. The committee argued that although Congress and a new National Institute will not likely fix all deficiencies within the current system, “truly meaningful advances will not come without significant concomitant leadership from the federal government.”

Although forensic evidence has been used to identify the guilty, it has also led to the conviction of the innocent. Some of these wrongful convictions resulted from forensic methods that have developed outside the rigors of the scientific method. The report states that “[a]though research has been done in some disciplines,

132. Id.
133. See id.
134. Fountain, supra note 96.
136. Id.
137. NAS REPORT, supra note 84, at 14.
138. Id. at xx.
139. Id. at 18.
140. See id. at 19–33.
141. Id. at 16.
there is a notable dearth of peer-reviewed, published studies establishing the scientific bases and validity of many forensic methods.”  

Forensic science embodies a range of analytical disciplines that exhibit “wide variability . . . with regard to techniques, methodologies, reliability, types and numbers of potential errors, research, general acceptability, and published material.” 144 Unfortunately, “no forensic method other than nuclear DNA analysis has been rigorously shown to have the capacity to consistently and with a high degree of certainty” match a sample to a source. 145 Despite these problems, Justice Kennedy began his dissent by stating that “[t]he Court sweeps away an accepted rule governing the admission of scientific evidence.” 146 However, Justice Kennedy ignored the subjectivity of some forms of forensic evidence and failed to recognize that it is not all infallible and equal.  

1. Subjective, expert-based evidence: fingerprints, ballistics, screwdrivers, and more  

Forensic evidence consists of laboratory based evidence and evidence based on “expert interpretation of observed patterns.” 147 Lab based evidence such as toxicology, DNA, and drug analysis, comes as a result of processes that have undergone the rigors of the scientific process. The NAS noticed a “sharp distinction[]” between chemists, biochemists, medical doctors, and the other forensic “technicians who lend support to forensic science enterprises.” 148 Forensic evidence based on expert interpretation and observed patterns provides analysts with much more subjectivity and an increased possibility of error and bias.  

Forensic evidence comes in many shapes and forms—from fingerprint and bite mark analysis, to ballistic patterns on spent shell casings. Although DNA is the most accurate and objective of forensic evidence, 149 it only makes up ten percent of laboratory case

143. NAS REPORT, supra note 84, at 8.  
144. Id. at 6–7.  
145. Id. at 87.  
147. NAS REPORT, supra note 84, at 7.  
148. Id.  
149. See id.
work\textsuperscript{150} and can still find itself subject to error and mistakes.\textsuperscript{151} The remaining forensic evidence used against defendants tends to consist of other more subjective evidence interpreted by analysts.\textsuperscript{152}

Fingerprint evidence has led to some embarrassing public misidentifications. One of the most famous of these came during the investigation into the Madrid, Spain train bombings in 2004.\textsuperscript{153} A fingerprint found on a plastic bag at the scene implicated an Oregon lawyer named Brandon Mayfield. His fingerprint was in the FBI database due to his prior military service. This fingerprint match led to Mayfield’s arrest and the FBI’s subsequent embarrassment due to the impossibility of Mayfield’s involvement.\textsuperscript{154}

Fingerprint identification has recently come under fire from legal experts.\textsuperscript{155} Juries sometimes do not understand the impreciseness of fingerprinting technology because “fingerprint examiners typically testify in the language of absolute certainty.”\textsuperscript{156} However, “certain confidence in identification [is] unjustified.”\textsuperscript{157} One scholar believes that in order to pass legal scrutiny as an expert witness, “fingerprint identification experts should exhibit a greater degree of epistemological humility.”\textsuperscript{158} In one study, when six fingerprint examiners studied the same print twice, only two of the six reached the same conclusion both times.\textsuperscript{159}

Some forensic science methods allow human error to easily enter into play. Human bias can lead to a technician trying to make the evidence fit his or her preconceived suspects rather than letting the evidence lead to the proper suspect. In an investigation resulting from the Mayfield case, for example, a panel of experts found that the involved “culture discouraged fingerprint examiners from disagreeing with their superiors” and was prone to insufficient

\textsuperscript{150} Id. at 41.
\textsuperscript{151} See, e.g., id. at 132.
\textsuperscript{152} See id. at 7, 38.
\textsuperscript{154} Id.
\textsuperscript{156} Id.
\textsuperscript{157} Id.
\textsuperscript{158} Id.
\textsuperscript{159} Reagan, supra note 1.
scrutiny. Although bias on the part of investigators may be well-intentioned, it may also lead to incorrect results. For example, researchers have noted that bias on the part of an investigator involved with suspect identification can lead to faulty identifications on the part of witnesses. Bias and error can also creep into other areas of forensic evidence.

Other methods often seen on CSI: Miami and viewed as authoritative by the public—such as ballistic identification, dental marks, and arson forensics—face the same limitations as fingerprints. As technology evolves, so do the data and evidence investigators can gather and use against defendants. Some are even trying, for example, to determine how to identify a screwdriver used in prying open a door or window. While the proponents of such evidence have excellent intentions and crave accuracy, these methods have often not been subjected to the rigors of the scientific process. Even when they have been, they often nevertheless lack the accuracy of DNA, or even that of fingerprints. When such evidence is used in court, the accused must always have an opportunity to cross-examine the analyst submitting it in order to help jurors realize the limits of such evidence.

2. Wrongful convictions

Wrongful convictions will continue to exist despite radical improvements regarding forensic science. After all, not all convictions are based on forensic evidence. Forensic evidence has been responsible for the exculpation of convicts as well as the conviction of the innocent.

Blackstone said, “Better that ten guilty persons escape than that one innocent suffer.” “But why ten?” asked Professor Volokh, in examining the number posited by various courts and legal jurists throughout the centuries. Regardless of the number of guilty that must go free in order to protect the innocent, society has a moral

160. Stout, supra note 153.
162. Fountain, supra note 96.
163. See supra note 4.
164. 4 WILLIAM BLACKSTONE, COMMENTARIES *358.
responsibility to make sure it does everything within its power to make sure this number is as low as possible. The United States must do everything within its power to ensure that evidentiary standards provide the accused with an adequate opportunity to confront the evidence against him. Otherwise, more innocent will suffer than necessary.

Many go to their graves professing their innocence, and the Innocence Project has helped free some convicts throughout the past few decades. With the rise in the number of people exonerated by DNA, one must wonder how many convicts are still wrongfully imprisoned. Although researchers debate the numbers of wrongfully convicted by forensic evidence, a few recent news events have brought the issue to the public eye.

Popular Mechanics and others in the media are starting to publicize the limits of forensic science and the human cost of it. In a recent issue of its magazine, Popular Mechanics profiled the conviction of Roy Brown. A New York jury convicted Brown based on bite marks found on the victim’s body that a forensic dentist identified as “entirely consistent” with Brown’s. Brown was later set free based on DNA evidence linking another suspect to the crime. Mistakes such as this are unfortunately common.

In combination with the recently published NAS Report, a number of popular non-legal periodicals have started examining the reliability of forensic science and its role in death row cases. It appears that Texas recently executed a death row inmate who was actually innocent, yet condemned by faulty forensic evidence. Although probably not the first wrongful execution, hopefully it will be the last as technology improves and as the accused receive more opportunities to cross-examine the evidence and its proponents against them.

167. Supra note 4.
169. Id.
C. Solutions

Going forward, both the Court and the forensic community must do its part to mitigate wrongful convictions and faulty science. The Court has done its part by requiring the prosecution to produce laboratory technicians and providing the defense with a right to confront these analysts. The scientific community must now implement the recommendations made by the NAS. In order to preserve the benefits that forensic evidence provides to investigators and mitigate the effects of faulty forensics, the NAS has recommended mandatory standardization, certification, and accreditation of laboratory analysts. Due to the broad range of forensic science disciplines, the NAS did not fully analyze each individual forensic area for its congressional report.

Determining the accuracy of forensic evidence requires a national change of procedure. One problem facing the field is that the broad range of forensic techniques makes it difficult for the forensic community to set clear standards across the board. Forensic techniques also differ in terms of the protocols and research available in each particular area. However, these circumstances do not mean the forensic community cannot define minimum standards and protocols.

In addition to minimum standards and protocols for each forensic discipline, the NAS identified a crucial need for courts and forensic analysts to identify the exact question the forensic evidence can address. For example, hair samples often cannot identify a specific individual, but it can likely identify specific traits. The NAS found that many forensic areas lacked established “limits and measures of performance” that would prevent incorrect inferences based on the evidence and technique. Identifying and establishing national standards, protocols, and limits of forensic evidence could lead to a reduction of faulty forensic evidence appearing in courts across the country.

The establishment of a national board to oversee the standards used in expert-based evidence would provide another level of accountability beyond mere cross-examination. Requiring

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172. NAS REPORT, supra note 84, at 6, 19.
173. Id. at 8.
174. Id.
175. Id.
certification of forensic technicians could help limit the impact and employment of faulty and unreliable forensic techniques in litigation and criminal cases. By providing defendants with the right to cross-examine technicians, hopefully jurors will realize that forensic evidence is not infallible. Permitting the prosecution to introduce forensic evidence affidavits without accompanying expert testimony undoubtedly reinforces the myth of the “CSI effect” in the minds of jurors.

D. The Future of the Confrontation Clause after Melendez-Diaz

Justice Sotomayor’s replacement of Justice Souter and the granting of certiorari in Briscoe v. Virginia provided the Court with an opportunity to further outline requirements for forensic witnesses or even reconsider its decision in Melendez-Diaz. The majority in Melendez-Diaz consisted of Justices Scalia, Stevens, Souter, Thomas, and Ginsburg. Chief Justice Roberts, along with Justices Kennedy, Breyer, and Alito made up the dissent. Accordingly, with Justice Sotomayor’s replacement of Justice Souter, her vote was almost certain to be the deciding vote in Briscoe.

The Court announced the decision in Melendez-Diaz on June 25, 2009. A few days later, on June 29, 2009, the Court granted certiorari to Briscoe,176 a case presenting a nearly identical issue to Melendez-Diaz.177 Although granting certiorari to Briscoe surprised some Court observers, some thought the Court wanted to hear Justice Sotomayor’s opinion on the issue.178 However, many others believed the Court would grant cert, vacate, and remand for further consideration in light of Melendez-Diaz.179 During Justice Sotomayor’s confirmation hearing, Minnesota Senator and former prosecutor Amy Klobuchar expressed her disagreement with the outcome of Melendez-Diaz and asked Justice Sotomayor for her

177. Compare Melendez-Diaz v. Massachusetts, 129 S. Ct. 2527, 2530 (2009) (“whether those affidavits are ‘testimonial,’ rendering the affiants ‘witnesses’ subject to the defendant’s right of confrontation under the Sixth Amendment”), with Briscoe, 129 S. Ct. 2858 (asking the Court to determine whether the prosecution violates the Confrontation Clause by making laboratory technicians available to testify at the request of defense and presenting certificates without the testimony of the technicians).
thoughts on the case. Justice Sotomayor did little to tip her hand about how she would have decided the case, but she did state that “it’s difficult proving cases as it is.” While noting that “calling more witnesses adds some burdens to the process,” Justice Sotomayor followed up by saying that “problems . . . can’t compel a result.”

Although the majority in Melendez-Diaz took on many of the counterarguments raised by the dissent, the Court left many procedural concerns unaddressed, including which technician testifies when multiple analysts are involved in an investigation, or how to mitigate possible floodgates opened by the decision. Rather than using Briscoe as an opportunity to address these issues or even cut back on the holding of Melendez-Diaz, however, the Court declined to do so. On January 25, 2010, the Court issued a per curium opinion vacating the Virginia Supreme Court ruling and remanding the case for further proceedings consistent with Melendez-Diaz. Why the Court initially granted certiorari remains unclear, but it is now evident that the Court reaffirmed Melendez-Diaz as good law. The Court explained why forensic analysts must testify, but left the procedural details concerning how to the lower courts.

VI. CONCLUSION

A two-pronged effort by the courts and the forensic community to combat the introduction of faulty evidence will lead to more accurate forensic evidence and fewer wrongful convictions. This Note is not proposing suppression of forensic evidence, rather its intent is to highlight why the Melendez-Diaz Court correctly held that the Confrontation Clause requires laboratory technicians to testify in court.

Justice Kennedy incorrectly stereotyped forensic evidence and the technicians who obtain the results as objective with little to no influence on the results. The NAS Report explains why this view is incorrect and suffers from the same “CSI effect” seen among the

181. Id.
182. Id.
general public. Should the Court have found that confrontation of lab analysts was not required by the Constitution, the “CSI effect” would have continued to deleteriously affect juries, and the idea that forensic evidence is infallible would have been legitimized. However, the Court’s decision in *Melendez-Diaz* appears to indicate that society is on the right track to exposing and avoiding the potential pitfalls when relying on forensic science.

As forensic evidence analysis improves so will its accuracy. Lawrence Kobilinsky, chairman of the department of sciences at John Jay College of Criminal Justice, described forensic science best: “It’s not junk science. But that doesn’t mean it shouldn’t be improved.”

The field of forensic science continues to improve its reliability and accuracy. As this happens, it is important that the accused have a chance to question the witnesses in court because it “is one means of assuring accurate forensic analysis.”

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