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DISTRICT OF COLUMBIA COURT OF APPEALS

No. 13-CF-1312

MARLON WILLIAMS, APPELLANT,

v.

UNITED STATES, APPELLEE.

Appeal from the Superior Court
of the District of Columbia
(CF1-18032-10)

(Hon. Russell F. Canan, Trial Judge)

On Petition for Rehearing

(Decided June 27, 2019)

Enid Hinkes for appellant.

Channing D. Phillips, United States Attorney at the time the briefs were filed, *Elizabeth Trosman*, *Suzanne Grealy Curt*, *Gary Wheeler*, and *Peter S. Smith*, Assistant United States Attorneys, were on the appellee's response to appellant's initial and supplemental petition for rehearing or rehearing *en banc*.

Samia Fam and *Alice Wang*, Public Defender Service, filed a brief as *amicus curiae* in support of appellant's petition for rehearing or rehearing *en banc*.

Before THOMPSON and EASTERLY, *Associate Judges*, and NEBEKER, *Senior Judge*.

Opinion for the court by *Associate Judge* EASTERLY.

Concurring opinion by *Associate Judge* EASTERLY at page 27.

Separate statement in concurrence by *Senior Judge* NEBEKER at page 29.

EASTERLY, *Associate Judge*: Marlon Williams seeks rehearing of our initial decision in his case, *Williams v. United States (Williams I)*, 130 A.3d 343 (D.C. 2016), in which we rejected his unpreserved challenge to the trial court’s admission of opinion testimony from a firearms and toolmark examiner that markings on the bullets recovered from the decedent’s car were “unique”; that, when the gun recovered from Mr. Williams’s apartment was test-fired, the bullets had “match[ing]” markings; and thus that the examiner did not have “any doubt” that the bullets recovered from the car were fired by Mr. Williams’s gun. *Id.* at 346–47. Because this court had not yet held expert opinion testimony of this sort to be impermissible, we held that any possible error was not “plain” such that it justified reversal under our four-prong test for review of unpreserved errors in criminal cases. *Id.* at 347.

Since *Williams I*, this court has issued decisions regarding the admission of firearms and toolmark testimony, *Gardner v. United States*, 140 A.3d 1172 (D.C. 2016), and expert testimony in general, *Motorola Inc. v. Murray*, 147 A.3d 751 (D.C. 2016) (en banc). In light of these decisions, which apply to Mr. Williams because his case is not yet final, we revisit our plain error analysis. We now

conclude that (1) the admission of the examiner's opinion testimony, which was based on toolmark pattern matching and unqualifiedly identified the bullets that killed Mr. Kang as having come from the gun recovered from Mr. Williams's apartment, was error, and (2) this error is plain. We further conclude, however, that Mr. Williams cannot satisfy the third prong of our test for plain error because he cannot show a reasonable probability of a different result absent this error. Thus, although we grant Mr. Williams's petition for rehearing, we affirm his convictions.

I. Facts and Procedural History

As there were no eyewitnesses to the shooting death of Min Soo Kang, the government primarily relied on circumstantial evidence to prove Mr. Williams's guilt at trial.¹ Specifically, the government presented evidence that in the early morning hours of September 13, 2010, Mr. Kang, who lived in Dunn Loring, Virginia, drove his new Cadillac Escalade SUV to a Virginia convenience store

¹ We highlight facts that bear on our analysis under the third prong of the test for plain error, an analysis we did not undertake in our initial opinion. The facts are derived from the evidence presented at Mr. Williams's second trial, which resulted in his conviction; Mr. Williams's first trial ended in a mistrial after the jury was unable to reach a verdict.

and purchased two cartons of Newport cigarettes—a brand he was not known to smoke—at over \$100 in value. Around 4 a.m., Mr. Kang’s body was discovered lying on the side of the road in Southeast D.C. He had been shot at least five times at close range. His wallet, containing his driver’s license, was still in his front pants pocket, but he did not have his car key. Using OnStar,² the police both located Mr. Kang’s SUV and remotely disabled the vehicle in the early evening of September 13. The MPD subsequently recovered the vehicle in the 5200 block of Ames Street NE. The ignition was intact. There were bullet holes in the backrest and blood on the driver’s seat. There was also blood on the passenger’s side of the car. Five packs of Newport cigarettes were found in the car, two in the driver’s side door.

Around the time OnStar remotely disabled Mr. Kang’s SUV, Ebony Hood saw a man whose description was consistent with Mr. Williams get out of that vehicle, put the hood up, and then slam it down. He told Ms. Hood he was waiting for a jump, but his behavior seemed “strange”; she took note of the fact that, when

² OnStar is a tracking system that can be installed in a vehicle. One service the OnStar corporation provides is “Stolen Vehicle Assistance,” which includes a “Remote Ignition Blocking” feature that was employed in this case. *See* OnStar Stolen Vehicle Assistance, <https://www.onstar.com/us/en/services/safety-security/stolen-vehicle-assistance/> (last visited June 21, 2019).

she heard sirens, she saw the man walk away from the car and discard something small. After the sirens passed, he retrieved the object but subsequently threw it away again. The following day, as Mary Gaffney was walking in the 5200 block of Ames Street NE, a man approached her, told her he had found some car keys, and handed them to her. Ms. Gaffney gave the keys to her friend, Rena Ross, who turned them into the police. The keys belonged to Mr. Kang's SUV.

The MPD recovered a number of latent fingerprints from the SUV. A fingerprint examiner subsequently opined that six prints—recovered from the exterior of the SUV, including the hood, and from the interior of the SUV on both the passenger's side door and the driver's side door—were left by Mr. Williams. The MPD recovered additional evidence from Mr. Williams's apartment, which was less than a half mile from where Mr. Kang's body was found: a Hi-Point³ brand firearm in Mr. Williams's bedroom,⁴ and a number of packs of Newport cigarettes. A firearms and toolmark examiner, Luciano Morales, compared the markings on the bullets test-fired from the gun found in Mr. Williams's apartment to the markings on the bullets recovered from the backrest of the driver's seat of

³ In the original panel opinion, we incorrectly referred to this firearms manufacturer as "High Point." *Williams I*, 130 A.3d at 346.

⁴ The exterior of the gun bore no fingerprints, but it was found next to a cloth bearing Mr. Williams's DNA.

the SUV and concluded that that gun was the murder weapon. In addition to this circumstantial evidence, the government called a cooperating witness, who testified that Mr. Williams made incriminating statements to him while they were both in a holding cell at the courthouse.

Based on this evidence, a jury convicted Mr. Williams of first-degree felony murder while armed, attempt to commit robbery while armed, and other weapons-related offenses.⁵ Mr. Williams appealed his convictions, arguing *inter alia*, that the trial court should not have permitted the government's firearms and toolmark examiner to unqualifiedly testify that, based on pattern matching, the gun recovered from Mr. Williams's apartment was the murder weapon. *Williams I*, 130 A.3d at 345, 347. This court affirmed on the ground that, in the absence of any objection at trial, the admission of the examiner's opinion testimony was subject to the test for plain error and there was as yet "no precedent in this jurisdiction that limits a toolmark and firearms examiner's testimony about the certainty of his pattern-matching conclusions." *Id.* at 347–48.

⁵ D.C. Code §§ 22-2101, -4502 (2001); D.C. Code §§ 22-2802, -4502, -1803 (2001); D.C. Code §§ 22-4504(a), (b) (2001).

Thereafter, Mr. Williams filed a petition for Rehearing and Rehearing En Banc, staying the issuance of the mandate.⁶ *See* D.C. App. R. 41(d). He amended his petition after this court issued its opinion in *Gardner*, 140 A.3d 1172. The en banc court initially denied Mr. Williams’s petition for rehearing or rehearing en banc but later granted his motion for reconsideration and continued to stay the issuance of the mandate. The en banc court also authorized Mr. Williams to file a supplemental petition and the Public Defender Service for the District of Columbia (PDS) to file an amicus brief in support of Mr. Williams’s petition. Upon receipt of these pleadings, this division directed the government to file a response addressing, *inter alia*, whether rehearing was warranted in light of *Gardner* and/or *Motorola*, 147 A.3d 751. We now resolve Mr. Williams’s petition for rehearing.

II. Analysis

As detailed in *Williams I*, the firearms and toolmark examiner called by the government testified on direct examination that when a bullet is fired from a particular gun, the gun leaves “unique” identifying marks, “similar to a fingerprint, basically.” 130 A.3d at 346. He testified that he microscopically examined the

⁶ The mandate prematurely issued in error and was recalled.

markings on the three bullets recovered from Mr. Kang's SUV; and he concluded that these bullets had all been fired by the same gun. *Id.* The examiner also testified that he test-fired the Hi-Point brand gun recovered from Mr. Williams's apartment (admitted as Exhibit No. 58); he compared the markings on those bullets with the bullets found in the SUV and determined that they "matched." *Id.* at 347. Based on this examination, the examiner opined that "these three bullets were fired from this firearm." *See id.* at 346. On redirect, when asked whether there was "any doubt in [his] mind" that the bullets recovered from Mr. Kang's SUV were fired from the gun found in Mr. Williams's bedroom, the examiner responded, "[n]o, sir." *Id.* The examiner elaborated that "[t]hese three bullets were identified as being fired out of Exhibit No. 58. And it doesn't matter how many firearms Hi[-]Point made. Those markings are unique to that gun and that gun only." *Id.* The examiner then restated his unequivocal opinion: "Item Number 58 fired these three bullets." *Id.*

Mr. Williams argues rehearing is warranted because, although defense counsel did not object to the examiner's opinion testimony, based on toolmark pattern matching, that the gun recovered from Mr. Williams's apartment was the murder weapon, it is now clear that admission of this testimony constitutes plain

error⁷ and requires reversal. We conclude that the first two prongs of the test for plain error are satisfied—that is, the admission of this opinion testimony was error and plainly so—but Mr. Williams’s claim fails on the third prong because he cannot show the requisite measure of harm.

A. Was There Error?

There have been two significant developments in this court’s jurisprudence since the publication of *Williams I*. First, in *Gardner v. United States*, 140 A.3d 1172 (D.C. 2016), this court reviewed a preserved challenge to the admission of opinion testimony by a firearms and toolmark examiner, who purported to match a specific gun to a specific bullet unqualifiedly, and concluded that such unqualified opinion testimony should not have been admitted. *Id.* at 1184. Second, in *Motorola Inc. v. Murray*, 147 A.3d 751 (D.C. 2016) (en banc), this court retired the test for the admission of expert testimony under *Frye v. United States*, 293 F. 1013 (D.C. Cir. 1923), and *Dyas v. United States*, 376 A.2d 827 (D.C. 1977), and

⁷ See *In re Taylor*, 73 A.3d 85, 96 (D.C. 2013) (explaining that, under this court’s “plain error” test for unpreserved errors in a criminal case, a defendant must show “(1) that there was a deviation from a legal rule; (2) that this error was clear or obvious, rather than subject to reasonable dispute;” “(3) that this error affected the defendant’s substantial rights;” and (4) that it compromised “the fairness, integrity or public reputation of judicial proceedings” (internal citations and quotation marks omitted)).

adopted the test set forth in *Daubert v. Merrell Dow Pharm., Inc.*, 509 U.S. 579 (1993), and Federal Rule of Evidence 702 (FRE 702). *Id.* at 752. Based on these changes to the law, we conclude that it was error to admit the examiner’s opinion testimony, based on pattern matching, that the gun recovered from Mr. Williams’s apartment was the murder weapon.

In *Gardner*, this court reviewed a preserved challenge to “unqualified and certain expert opinion that the bullet recovered from the decedent’s body came from a specified silver gun.” *Id.* at 1177 (internal quotation marks omitted); *see also id.* at 1182 (noting that examiner testified that “the silver gun was the murder weapon”).⁸ The court acknowledged that “the admission of expert testimony concerning ballistics comparison matching techniques” had been allowed in this jurisdiction “[f]or decades.” *Id.* at 1183. But the court explained that “[b]eginning around 2008, . . . questions about pattern matching generally, and bullet pattern matching specifically, surfaced in the scientific community.” *Id.* The court

⁸ Unlike in Mr. Williams’s case, in *Gardner*, the expert did not additionally, expressly state that he was without any doubt about his conclusion.

highlighted two federal government reports concluding that pattern matching should not be relied upon to link specific firearms to specific bullets.⁹ *Id.* at 1183.

The first report cited by *Gardner, Ballistic Imaging*, was written by a committee of scientists and statisticians at the behest and with the sponsorship of the Department of Justice. THE NATIONAL RESEARCH COUNCIL (NRC)¹⁰ COMMITTEE TO ASSESS THE FEASIBILITY, ACCURACY, AND TECHNICAL CAPABILITY OF A NATIONAL BALLISTICS DATABASE, BALLISTIC IMAGING ix, xi (Daniel L. Cork et al. eds., 2008) [hereinafter *Ballistic Imaging*]. Although the NRC Committee's charge was to assess the feasibility and utility of establishing "a national reference ballistic image database," *id.* at 1, it first had to address the "[u]nderlying . . . question" of "whether firearms-related toolmarks are unique: that is, whether a particular set of toolmarks can be shown to come from one

⁹ *Gardner* also cited to recent articles published in legal journals that documented the challenges courts face when trying to assess the scientific validity of various forensic disciplines, including ballistics matching, as well as the past failures of courts to adequately address these challenges. See 140 A.3d at 1183–84 (citing Jules Epstein, *Preferring the "Wise Man" to Science: The Failure of Courts and Non-Litigation Mechanisms to Demand Validity in Forensic Matching Testimony*, 20 WIDENER L. REV. 81, 81–83, 85–88 (2014); Bonnie Lanigan, Note, *Firearms Identification: The Need For a Critical Approach To, And Possible Guidelines For, the Admissibility of "Ballistics" Evidence*, 17 SUFFOLK J. TRIAL & APP. ADV. 54, 65–67 (2012)).

¹⁰ The NRC is a component of the congressionally-chartered National Academy of Science (NAS). *Ballistic Imaging* at iii.

weapon to the exclusion of all others.” *Id.* at 3. The NRC Committee determined that there was no data-based foundation to make such pronouncements with any certainty. *Id.*; *see also Gardner*, 140 A.3d at 1183 (explaining that one conclusion of the *Ballistic Imaging* report was that “[t]he validity of the fundamental assumptions of uniqueness and reproducibility of firearms-related toolmarks has not yet been fully demonstrated”).¹¹

The second report cited by *Gardner*, *Strengthening Forensic Science in the United States: A Path Forward*, was commissioned directly by Congress and reviewed a range of forensic analyses. THE NATIONAL RESEARCH COUNCIL, COMMITTEE ON IDENTIFYING THE NEEDS OF THE FORENSIC SCIENCE COMMUNITY,

¹¹ In the absence of such data, the NRC Committee determined that, “as firearms identification is currently practiced, an examiner’s assessment of the quality and quantity of resulting toolmarks and the decision of what does or does not constitute a match comes down to a subjective determination based on intuition and experience.” *Ballistic Imaging* at 55. The NRC Committee expressed concern that examiners nonetheless “tend to cast their assessments in bold absolutes, commonly asserting that a match can be made ‘to the exclusion of all other firearms in the world.’” *Id.* at 82. The NRC Committee criticized this sort of testimony, explaining that “[s]uch comments cloak an inherently subjective assessment of a match with an extreme probability statement that has no firm grounding and unrealistically implies an error rate of zero.” *Id.* “[S]topping short of commenting on whether firearms toolmark evidence should be admissible” in court, the NRC Committee declared that “[c]onclusions drawn in firearms identification should not be made to imply the presence of a firm statistical basis when none has been demonstrated.” *Id.* (emphasis in original).

STRENGTHENING FORENSIC SCIENCE IN THE UNITED STATES: A PATH FORWARD xv–xviii, xix (2009) [hereinafter *Strengthening Forensic Science*]. Regarding toolmark evidence in particular, the report explained that “[i]ndividual patterns from manufacture or from wear might, in some cases, be distinctive enough to *suggest* one particular source.” *Id.* at 154 (emphasis added). But a definitive “match” could not be declared “[b]ecause not enough is known about the variabilities among individual tools and guns” or “how many points of similarity are necessary for a given level of confidence in the result.” *Id.*¹²

This court in *Gardner* commented that, particularly after the issuance of the *Strengthening Forensic Science* report, “some jurisdictions began to limit the scope of a ballistics expert’s testimony.” 140 A.3d at 1183. Following suit, the court in *Gardner* held that the trial court had “erred by allowing [the firearms and toolmark examiner] to give an unqualified opinion about the source of the bullet that killed [the decedent].” *Id.* at 1184. The court “further h[e]ld that in this jurisdiction a

¹² More generally, the *Strengthening Forensic Science* report made a number of recommendations “to improve the forensic science disciplines and to allow the forensic science community to serve society more effectively,” *id.* at xix, including the recommendation that “[f]orensic reports, and any courtroom testimony stemming from them, . . . include clear characterizations of the limitations of the analyses, including measures of uncertainty in reported results and associated estimated probabilities where possible,” *id.* at 21–22.

firearms and toolmark expert may not give an unqualified opinion, or testify with absolute or 100% certainty, that based on ballistics pattern comparison matching a fatal shot was fired from one firearm, to the exclusion of all other firearms.” *Id.*

In a footnote, the court in *Gardner* stated that its holding was “limited in that it allows toolmark experts to offer an opinion that a bullet or shell casing was fired by a particular firearm, but it does not permit them to do so with absolute or 100% certainty.” 140 A.3d at 1184 n.19. The government relies on this footnote to argue that *Gardner* only prohibited certainty statements and otherwise continued to authorize opinion testimony identifying a specific bullet as having been fired by a specific gun. But the government’s interpretation of this footnote is difficult to square with the above-the-line holding that the trial court “had erred” by admitting the examiner’s “unqualified opinion,” that the “the silver gun was the murder weapon.” *Id.* at 1184. The government also cites decisions from other jurisdictions in which a firearms and toolmark examiner was permitted to “match” bullets to a gun under a *Daubert*/FRE 702 analysis,¹³ but these decisions are

¹³ *United States v. Hicks*, 389 F.3d 514 (5th Cir. 2004); *United States v. Sebborn*, 2012 WL 5989813 (E.D.N.Y. Nov. 30, 2012); *United States v. Otero*, 849 F.Supp.2d 425 (D.N.J. 2012); *but see United States v. Green*, 405 F. Supp. 2d 104, 108 & n.3, 124 (D. Mass. 2005) (declining, in light of the current state of research, to allow the examiner to testify to any conclusion of a “match” and limiting the examiner’s testimony to a report of observed similarities).

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unhelpful in interpreting *Gardner*'s holding because *Gardner* did not cite to them, opting instead to rely, inter alia, on the *Ballistics Imaging and Strengthening Forensic Science Reports*.¹⁴ Moreover, the publication post *Gardner* of another federal government report—President's Council of Advisors on Science and Technology ("PCAST"), *Forensic Science in Criminal Courts: Ensuring Scientific Validity of Feature-Comparison Methods* (Sept. 2016), available at https://obamawhitehouse.archives.gov/sites/default/files/microsites/ostp/PCAST/pca_forensic_science_report_final.pdf (last visited June 21, 2019) [hereinafter PCAST Report]—that reiterates toolmark and firearms examiners do not currently have a basis to give opinion testimony that matches a specific bullet to a specific gun and that such testimony should not be admitted without a verifiable error rate

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The government also cites an unpublished federal trial court decision, *United States v. Cerna*, 2010 WL 3448528 (N.D. Cal. 2010), but the court in that case did not make a final determination that the government could present such opinion testimony; rather, after determining that the defense had not yet received "adequate documentation" regarding the firearms and toolmark examiner's procedures and methods, the court ruled that the defense could renew its *Daubert*/FRE 702 challenge after receipt of this information.

¹⁴ The only federal appellate decision cited by the government, *Hicks*, predates these government reports. The federal trial court decisions cited by the government mention these reports only in passing.

does not support the government’s argument that only express statements of certainty should be prohibited.¹⁵

¹⁵ The PCAST Report evaluated and deemed inadequate the studies that have thus far been done to support the proposition “that every gun produces ‘unique’ toolmarks,” *id.* at 105, such that a gun can be matched to a fired bullet or vice versa. *See id.* at 104–106, 112 (“find[ing] that firearms analysis currently falls short of the criteria for foundational validity”); *id.* at 150 (same; urging empirical studies to develop error rates for any pattern-matching ballistics analysis); *see also* President’s Council of Advisors on Science and Technology, An Addendum to the PCAST Report on Forensic Science in Criminal Courts 6, 9 (Jan. 6, 2017), available at https://obamawhitehouse.archives.gov/sites/default/files/microsites/ostp/PCAST/pcast_forensics_addendum_finalv2.pdf (last visited June 21, 2019) (reiterating that most toolmark studies have used “flawed designs” and urging forensic practitioners “to embrace a new, empirical approach . . . to transform subjective [pattern-matching] methods into objective methods”). More generally, the PCAST Report renewed the call to establish the foundational validity of a number of forensic pattern-matching disciplines. *Id.* at 4–5 (defining foundational validity as “the *scientific* concept we mean to correspond to the *legal* requirement in [Federal] Rule [of Evidence] 702(c), of reliable principles and methods” (internal quotation marks omitted)). It also affirmed the importance of ensuring “validity [of these disciplines] as applied,” but it stressed,

neither experience, nor judgment, nor good professional practices (such as certification programs and accreditation programs, standardized protocols, proficiency testing, and codes of ethics) can substitute for actual evidence of foundational validity and reliability. The frequency with which a particular pattern or set of features will be observed in different samples, which is an essential element in drawing conclusions, is not a matter of “judgment.” It is an empirical matter for which only empirical evidence is relevant. Similarly, an expert’s expression of *confidence* based on personal professional experience or expressions of *consensus* among practitioners about the accuracy of their field is no substitute for error rates estimated from relevant studies.

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We ultimately conclude that we need not resolve the ambiguity of *Gardner's* footnote 19 in this case where the firearms and toolmark examiner not only testified, like the examiner in *Gardner*, that a specific bullet could be matched to a specific gun, but also that he did not have “any doubt” about his conclusion. There is no question that it was error to admit this opinion testimony however the holding of *Gardner* is articulated.

But *Gardner* was decided while the test under *Frye/Dyas* governed the admission of expert testimony, and *Frye/Dyas* is no longer the law in this jurisdiction. With this court’s subsequent en banc decision in *Motorola*, 147 A.3d 751, we aligned our test for the admission of expert testimony with that of the federal courts under *Daubert*, 509 U.S. at 589–95, and FRE 702. In so doing, we shifted our focus from “general acceptance,”¹⁶ *Motorola*, 147 A.3d at 753–54, to

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For forensic feature-comparison methods, establishing foundational validity based on empirical evidence is thus a *sine qua non*. Nothing can substitute for it.

Id. at 6; *see also id.* at 137–38 (explaining that, in all areas of forensic comparison, it is not enough to preclude analysts from making “sweeping claims that they can identify the source . . . to the exclusion of all other possible sources”; analysts must also be able to tell the fact-finder how likely it is that they are wrong).

¹⁶ *See, e.g., (John) Jones v. United States*, 990 A.2d 970, 980 (D.C. 2010) (explaining that “[u]nder *Frye*, the methodology underpinning scientific testimony (continued...)

“whether the reasoning or methodology underlying the testimony is scientifically valid and . . . whether that reasoning or methodology properly can be applied to the facts in issue,” *id.* at 754 (quoting *Daubert*, 509 U.S. at 592–93). *See also id.* (“[T]he trial judge must still ensure that any and all scientific testimony or evidence admitted is not only relevant, but reliable.” (brackets omitted) (quoting *Daubert*, 509 U.S. at 589)); *Daubert*, 509 U.S. at 590 n.9 (explaining that “[i]n a case involving scientific evidence, *evidentiary reliability* will be based on *scientific validity*” (emphasis in original)). Similarly, FRE 702, which was revised to align with *Daubert*, permits a witness to provide expert testimony only if, *inter alia*, “the testimony is the product of reliable principles and methods; and . . . the expert has reliably applied the principles and methods to the facts of the case.” *Motorola*, 147 A.3d at 756 (quoting FED. R. EVID. 702). Ultimately, “[t]he goal [under *Daubert* and FRE 702] is to deny admission to expert testimony that is not reliable, but to admit competing theories if they are derived from reliable principles that have been reliably applied.” *Id.* at 757.

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must enjoy general acceptance among practitioners in the relevant field of scientific inquiry”).

Our endorsement in *Motorola* of a test for the admission of expert testimony that focuses on reliability dovetails perfectly with the analysis in *Gardner*. Although decided when *Frye/Dyas* was still the law, *Gardner* scrutinized the firearms and toolmark examiner's opinion testimony through a reliability lens¹⁷ and cited sources that explain that the empirical foundation does not currently exist to permit these examiners to opine with certainty that a specific bullet can be matched to a specific gun. In line with *Motorola*, *Gardner* determined that these conclusions are simply unreliable.

Although, in the government's view, *Motorola* should have no effect on this appeal, it expresses concern that this court, applying our en banc decision, might hold that all firearms and toolmark evidence is inadmissible. We do not so hold, and we do not question the admissibility of the firearms and toolmark examiner's testimony generally. The only issue before us is whether it is error for an examiner to provide unqualified opinion testimony that purports to identify a specific bullet

¹⁷ Indeed, the court noted that “[t]he parties d[id] not make any explicit arguments based upon either *Frye v. United States*, 293 F. 1013 (D.C. Cir.1923), or *Dyas v. United States*, 376 A.2d 827 (D.C.1977).” 140 A.3d at 1184 n.19. Instead, the parties focused on the import of this court's decision in (*Ricardo*) *Jones v. United States*, 27 A.3d 1130 (D.C. 2011), where we assumed without deciding that “[firearms] experts should not be permitted to testify that they are 100% certain of a match, to the exclusion of all other firearms,” 27 A.3d at 1139; see *Gardner*, 140 A.3d at 1184.

as having been fired by a specific gun via toolmark pattern matching.¹⁸ Following *Gardner*, we repeat that it is error to allow an examiner to provide this kind of unqualified opinion testimony, but we do not foreclose the possibility that the necessary data will exist at some point in the future to provide a foundation for opinion testimony that unqualifiedly connects a specific bullet to a specific gun.¹⁹ Rather, we conclude only that we do not have such a foundation in this case.

B. Was the Error Plain?

Having determined that the admission of the examiner's opinion testimony in this case, unqualifiedly linking a specific bullet to a specific gun based on pattern matching, was error, we turn to the question of whether that error is "plain," i.e., "clear or obvious, rather than subject to reasonable dispute." *In re Taylor*, 73 A.3d at 96 (quoting *Puckett v. United States*, 556 U.S. 129, 135 (2009)). We ask whether an error is "clear under current law," *Conley v. United States*, 79

¹⁸ The government acknowledges that its policy regarding permissible opinion testimony by firearms and toolmark examiners has already "evolved" and that prosecutors at the USAO are being trained that an "expert may not offer an opinion with absolute or 100% certainty, or to a reasonable degree of scientific (or forensic discipline) certainty."

¹⁹ We also do not limit firearms and toolmark examiners from making other observations about the ballistics evidence recovered in a particular case; such observations are not at issue in this case.

A.3d 270, 289 (D.C. 2013) (quoting *United States v. Olano*, 507 U.S. 725, 734 (1993)), and our focus is on the plainness of the error at the time of our appellate review, *Muir v. District of Columbia*, 129 A.3d 265, 274 (D.C. 2016) (citing *Henderson v. United States*, 568 U.S. 266, 279 (2013)). Thus, in assessing the plainness of the error in this case, we look to *Gardner* and *Motorola*, even though these decisions were issued after Mr. Williams was convicted.²⁰

Although it acknowledges that this court’s decision in *Gardner* should inform our plain error analysis in this case, the government argues that this court’s subsequent en banc decision in *Motorola* should not. The government notes that the en banc court in *Motorola* did not decide whether its holding applied “to cases that have already been tried but are not yet final on direct appeal.” 147 A.3d at 759.²¹ But there can be no serious question that the standards adopted for the admission of expert testimony in *Motorola* apply to all cases, like Mr. Williams’s, that are still “pending on direct review or not yet final.” *Davis v. Moore*, 772 A.2d 204, 226 (D.C. 2001) (en banc) (holding that “all newly declared rules of law must

²⁰ They were also issued after our initial opinion concluding that Mr. Williams failed to satisfy the test for plain error, but our appellate review is not final until the mandate of this court issues, which has not yet happened in Mr. Williams’s case. See Part I *supra*.

²¹ We declined to reach this issue because it was not presented. *Motorola*, 147 A.3d at 759.

be applied retroactively to all criminal cases” in this category); *id.* at 226 n.20 (defining finality as the point in time when “judgment of conviction has been rendered, the availability of appeal exhausted, and the time for a petition for certiorari elapsed or a petition for certiorari finally denied”); *see also id.* at 228 (rejecting the “ad hoc and standardless” retroactivity inquiry then in place).²²

In the wake of *Gardner* and *Motorola*, it is plainly error to allow a firearms and toolmark examiner to unqualifiedly opine, based on pattern matching, that a specific bullet was fired by a specific gun.

C. Did the Error Affect Substantial Rights?

Under the test for plain error, we must next determine whether the error in question “affect[ed] [appellant’s] substantial rights.” *Perry v. United States*, 36 A.3d 799, 818 (D.C. 2011). “To meet this third prong of plain error review, it is appellant[’s] burden to show a ‘reasonable probability’ of a different outcome” but

²² The government makes no argument that *Motorola* should be the subject of some sort of exception to the “firm rule of retroactivity” adopted in *Davis*, 772 A.2d at 230, other than to highlight that Mr. Williams “failed to preserve *any* challenge to the firearms examiner’s testimony.” But that fact is not an argument against retroactive application of *Motorola* or any other decision (such as *Gardner*, which the government concedes applies to Mr. Williams’s case); rather it is the reason we review for plain error.

for the error. *Id.* (citing *United States v. Dominguez Benitez*, 542 U.S. 74, 81–82 (2004) (equating the test for prejudice “affecting substantial rights” under plain error review with the prejudice prong of *Strickland*²³ and the *Kotteakos*²⁴ standard for harmless error review)). An appellant need not show that a different result was more likely than not. *Id.* at 819. But an appellant must show “more than a mere possibility of prejudice,” so as to support a determination that the error in fact “undermines confidence in the trial’s outcome.” (*Michael*) *Jones v. United States*, 202 A.3d 1154, 1168 (D.C. 2019); *see also Perry*, 36 A.3d at 819.

Based on the record, we are unpersuaded there is more than a “mere possibility” that the examiner’s testimony prejudiced Mr. Williams. Although the government’s case against Mr. Williams was comprised almost entirely of circumstantial evidence, that evidence was powerful. Arguably the most powerful incriminating evidence was the presence of fingerprints—which Mr. Williams conceded were his—both on the inside and outside of Mr. Kang’s car.²⁵ Mr. Williams’s counsel rightly told the jury that it was not his job to explain when or

²³ 466 U.S. 668 (1984).

²⁴ 328 U.S. 750 (1946). When the *Kotteakos* standard is applied to preserved errors, however, the government bears the burden of proving that the error is harmless. *Wheeler v. United States*, 930 A.2d 232, 246 (D.C. 2007).

²⁵ In closing, defense counsel told the jury, “we’re not denying that my client’s fingerprints were on that Cadillac.”

how Mr. Williams's prints came to be on the car, but the government's narrative—that Mr. Williams had left the prints behind as he killed Mr. Kang and stole his SUV—was compelling.

There was no evidence that the men knew each other. Mr. Kang lived in Dunn Loring, Virginia; Mr. Williams lived in Southeast D.C. Just two hours before he was found dead, Mr. Kang had gone to a convenience store in Virginia and purchased over \$100 of Newport cigarettes. Because this was a brand he was not known to smoke but that Mr. Williams did, this purchase supports an inference that the men interacted before Mr. Kang died. Mr. Kang's body was left by the side of the road less than a half mile from Mr. Williams's home. Hours after Mr. Kang's death, just about the time the vehicle was remotely disabled by OnStar, Ms. Hood saw someone resembling Mr. Williams in and around Mr. Kang's SUV. The man was looking under the hood (a location where the police recovered Mr. Williams's prints), apparently trying to figure out why it had suddenly stopped working. Lastly, this man, whose movements in and outside of the car corresponded to the locations where Mr. Williams's fingerprints were recovered, seemed wary of encountering the police—walking away from the car at the sound of sirens and discarding a small object that appears to have been the car keys—but not at all troubled that the car was the obvious scene of a violent crime, with blood

all over the front driver and passenger areas and bullets in the driver's backrest. As the government persuasively argued in closing, the condition of the interior of the car rendered it implausible that this man, who the government had strong evidence was Mr. Williams, was simply acting as a fence or an accessory after the fact:

I mean, you're not going to accept that car from somebody, [“]Hey, here is the keys to the Escalade.[”] When you get in and you see those bullet holes, you're not going to be riding around [in] that. When you see blood in the back seat,^[26] you're not going to be riding around in that. The only way you're riding around in that is if you took it from the beginning.

The government also presented evidence from a cooperating witness who testified that, while he and Mr. Williams shared a holding cell behind the courtroom, Mr. Williams made detailed incriminating statements to him that aligned with the physical evidence, including the uncontested presence of Mr. Williams's fingerprints on the SUV. Most notably, the witness testified that Mr. Williams said that he had “wiped his prints off the gun” with the result that only link the police had between him and the weapon was that “it was found in his room.” The witness also testified that Mr. Williams said he had tried to “wipe[] his prints off the [stolen] vehicle,” but that police “found [his] prints” on the inside of

²⁶ The government appears to have misspoken. Blood was found on the front seats of the car, not the back.

the passenger-side door. Finally, the witness testified that, just before Mr. Williams exited the holding cell to walk into the courtroom, Mr. Williams told the witness, “It’s time to put my game face on” and then asked “[i]f you didn’t know anything about my case, could you tell that . . . I murdered somebody?”²⁷

Thus, even without the ballistics evidence, the government had a powerful circumstantial case. And though the government certainly mentioned the examiner’s testimony identifying the gun recovered from Mr. Williams’s apartment as the murder weapon, we must also acknowledge that even if this opinion testimony had been properly excluded under *Gardner*, the government still would have been able to present evidence that the police recovered a gun from Mr. Williams’s home, and the firearms and toolmark examiner at a minimum would have been able to testify that Mr. Williams’s gun was capable of firing bullets of the sort that killed Mr. Kang.²⁸

²⁷ Mr. Williams largely ignores the other evidence presented by the government; he addresses it only in one sentence in which he asserts that, apart from the firearms and toolmark examiner’s opinion testimony, “the government had only the fingerprints of [Mr.] Williams on the SUV, left there at an unknown time; and a questionable statement of a compensated jailhouse informant, vague in details and contradicting some of the fingerprint evidence.” As reflected above, this does not accurately reflect the record.

²⁸ Although defense counsel did elicit an admission from the examiner that guns made by the same manufacturer may leave similar toolmarks on shell casings, (continued...)

Reviewing the record as a whole, we conclude Mr. Williams cannot show there was a reasonable probability that the jury might have reached a different conclusion had the trial court properly excluded the firearms and toolmark examiner's opinion testimony unqualifiedly identifying the gun found in Mr. Williams's apartment as the murder weapon.

III. Conclusion

Because we conclude that Mr. Williams cannot satisfy our test for plain error, we affirm his convictions.

So ordered.

Easterly, *Associate Judge*, concurring: As noted above, *ante* at 16, the majority opinion does not resolve what footnote 19 in *Gardner* means. After

(...continued)

we decline to say that defense counsel defused the examiner's pattern-matching opinion testimony through cross-examination. *See United States v. Glynn*, 578 F. Supp. 2d 567, 574 (S.D.N.Y. 2008) (explaining that cross-examination is unlikely to be effective when firearms and tool mark examiners "make assertions that their matches are certain beyond all doubt"); *accord United States v. Ashburn*, 88 F. Supp. 3d 239, 248 (E.D.N.Y. 2015).

holding that (1) the trial court had “erred by allowing [the firearms and toolmark examiner] to give an unqualified opinion about the source of the bullet that killed [the decedent],” *Gardner v. United States*, 140 A.3d 1172, 1184 (D.C. 2016), and (2) “in this jurisdiction a firearms and toolmark expert may not give an unqualified opinion, or testify with absolute or 100% certainty, that based on ballistics pattern comparison matching a fatal shot was fired from one firearm, to the exclusion of all other firearms,” *id.*, this court stated in footnote 19 that its holding was “limited in that it allows toolmark experts to offer an opinion that a bullet or shell casing was fired by a particular firearm, but it does not permit them to do so with absolute or 100% certainty.” *Id.* at 1184 n.19.

The government argues that this footnote limits *Gardner*’s holding to prohibiting express certainty statements and that it is still authorized, post *Gardner*, to present opinion testimony identifying a specific bullet as having been fired by a specific gun. I agree with our determination that “the government’s interpretation of this footnote is difficult to square with the above-the-line holding that the trial court ‘had erred’ by admitting the examiner’s ‘unqualified opinion,’ that the ‘the silver gun was the murder weapon.’” *Ante* at 14 (citing *id.* at 1184). But I would take this opportunity to explicate footnote 19. Placed in factual context of the testimony provided in *Gardner* and the analytic context of the government reports

cited by the court, this footnote can only logically be understood in one way: as an acknowledgment that the government might be able to present expert opinion testimony that a specific bullet was fired by a specific a gun if the examiner could reliably qualify his pattern-matching opinion—i.e., if he can provide a verifiable error rate. *See ante* at notes 11, 12, & 15; *cf. Gardner*, 140 A.3d at 1184 (expressing doubt that it would be sufficient for an examiner to qualify that his pattern-matching opinion was made with “a reasonable degree of certainty”).

NEBEKER, *Senior Judge*, separate statement in concurrence: This is not a case in which to resolve the knotty question of to what degree of certainty, or not, an expert’s opinion is admissible as to a particular fact. This is a direct appeal from convictions, which is confined to a harmless error judgment.