CRIMINAL LAW – POST-CONVICTION PROCEEDINGS – INEFFECTIVE ASSISTANCE OF COUNSEL – CHALLENGE TO STATE'S SCIENTIFIC EVIDENCE

Attorneys who failed to cross-examine the State's Comparative Bullet Lead Analysis expert about flaws underlying the science forming the basis of his opinion connecting defendant to alleged crime scene and murder weapon when flaws were discoverable through a report the expert himself co-authored four years prior to trial rendered ineffective assistance of counsel, thereby entitling the defendant to a new trial.

Circuit Court for Baltimore County, Maryland Case No. K-93-530

Argued: October 3, 2013

$\frac{\hbox{IN THE COURT OF APPEALS OF}}{\hbox{MARYLAND}}$

No. 13

September Term, 2013

JAMES KULBICKI

V.

STATE OF MARYLAND

Harrell
Battaglia
Greene
Adkins
McDonald
Eldridge, John C. (Retired,
Specially Assigned)
Rodowsky, Lawrence F.
(Retired, Specially
Assigned),

JJ.

Opinion by Battaglia, J. Harrell, McDonald, and Rodowsky, JJ., dissent

Filed: August 27, 2014

The Petitioner, James Kulbicki, was convicted in 1995 of first-degree murder and the use of a firearm in the commission of a felony in the Circuit Court for Baltimore County, based, in part, on the testimony of Agent Ernest Peele of the Federal Bureau of Investigation. Agent Peele testified that a bullet fragment found in Kulbicki's truck and a bullet found inside the victim were "what you'd expect if you were examining two pieces of the same bullet," and moreover, that a bullet recovered from a handgun found in Kulbicki's home "could have been in the same box" as the bullet taken from the victim, relying on Comparative Bullet Lead Analysis ("CBLA").² We determined, however, in

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After obtaining the elemental composition numbers, the samples are categorized "according to similarity of compositional presence." "Compositions similar to a crime scene bullet(s) are put in one group and considered 'analytically indistinguishable'; compositions considered dissimilar are placed in different groups and considered 'analytically distinguishable." From that data, the expert witness will draw a conclusion as to the probative significance of "finding 'analytically indistinguishable' (similar) compositions in both crime scene and 'known' bullet samples." The entire process is premised upon three assumptions: the fragment being analyzed is representative of "the composition of the source from which it originated"; the source from which the sample is derived is compositionally homogeneous; and "no two molten sources are ever produced with the same composition."

(continued...)

¹ Kulbicki, originally, was convicted in 1993, but that conviction was reversed by the Court of Special Appeals. *Kulbicki v. State*, 102 Md. App. 376, 649 A.2d 1173 (1994). After Kulbicki was re-tried and convicted in 1995, the Court of Special Appeals affirmed the conviction in an unreported decision, and we denied his petition for a writ of certiorari. *Kulbicki v. State*, 345 Md. 236, 691 A.2d 1312 (1997).

² In *Clemons v. State*, 392 Md. 339, 896 A.2d 1059 (2006), we had occasion to explain the CBLA process as utilized by the FBI:

2006 that under the *Frye-Reed* standard,³ CBLA evidence was not generally accepted by the scientific community. *Clemons v. State*, 392 Md. 339, 896 A.2d 1059 (2006). One of the major flaws of CBLA, we observed in *Clemons*, was that it had been predicated on the assumption that each source of lead from which bullets were derived was unique, allowing bullets that come from different batches to be distinguished from one another, an assumption that we determined to be questionable; "The assumption that each molten lead source is unique is also being questioned by analytical chemists and metallurgists." *Id.* at 369, 896 A.2d at 1077.

Kulbicki was convicted before *Clemons* was decided. Nevertheless, within a few years of his conviction, he sought post-conviction relief under the Uniform Postconviction

(...continued)

Clemons v. State, 392 Md. 339, 367-68, 896 A.2d 1059, 1076 (2006) (internal citations omitted). As we explained in *Clemons*, however, by 2006, the latter two assumptions had come under attack by the scientific community:

Recently the assumptions regarding that uniformity or homogeneity of the molten source and the uniqueness of each molten source that provide the foundation for CBLA have come under attack by the relevant scientific community of analytical chemists and metallurgists.

Id. at 368, 896 A.2d at 1076.

The *Frye-Reed* test "is the test in Maryland for determining whether expert testimony is admissible. The name is derived from two cases, *Frye v. United States*, 293 F. 1013 (D.C.Cir. 1923), where this standard of general acceptance in the relevant scientific community was first articulated, and *Reed v. State*, 283 Md. 374, 391 A.2d 364 (1978), where we adopted the *Frye* standard." *Blackwell v. Wyeth*, 408 Md. 575, 577 n.1, 971 A.2d 235, 237 n.1 (2009).

Procedure Act,⁴ arguing not only that the admission of "unreliable" CBLA evidence was a due process violation, but that his attorneys rendered ineffective assistance of counsel for failing to adequately cross-examine Agent Peele.⁵ The Circuit Court Judge denied relief,

- 1. The attorneys failed to request the underlying data forming the basis of the FBI's conclusions regarding CBLA.
- 2. The attorneys failed to obtain independent statistical analysis that would have shown the FBI examiner was ignoring exculpatory data.
- 3. The attorneys failed to adequately cross-examine the CBLA expert, for example, the total number of bullets manufactured that would be analytically indistinguishable was not explored.
- 4. The attorneys failed to request a *Frye-Reed* hearing that would have led to the suppression of the CBLA evidence.

* * *

6. Defense counsel failed to object on the ground that the FBI examiner's opinions and conclusions were outside those expressed in his report and therefore the State had not given notice as required by discovery rules.

After we decided *Clemons* in 2006, Kulbicki filed a supplement to his post-conviction Petition, using our decision in *Clemons* to bolster his arguments that the admission of CBLA evidence entitled him to a new trial.

⁴ In 1997, when Kulbicki initiated these proceedings, the Uniform Postconviction Procedure Act was codified at Sections 645A *et seq.* of Article 27 the Maryland Code. It was re-codified in 2001 as part of the new Criminal Procedure Article. Chapter 10, Laws of Maryland 2001. The Act currently appears at Sections 7-101 *et seq.* of the Criminal Procedure Article, Maryland Code (2001, 2008 Repl. Vol., 2013 Supp.).

⁵ Kulbicki filed his initial Petition for Post-Conviction Relief in 1997 without the assistance of counsel. At his request, the hearing on his initial post-conviction claim was postponed until Kulbicki filed amended petitions in 2004 and 2005. After a number of additional requests for postponements by Kulbicki, in 2006, with the assistance of counsel, he filed another amended petition that consolidated various claims. The 2006 Petition alleged, with respect to Kulbicki's claim of ineffective assistance of counsel that, "[a]lthough much of the evidence that has led to the demise of CBLA is newly discovered, the trial attorneys failed to make use of evidence that was in existence at the time." Specifically, the Petition asserted the following:

opining with respect to Kulbicki's ineffective assistance of counsel claim that "questions concerning the reliability of that science didn't even surface until long after Mr. Kulbicki's trial", and therefore, Kulbicki's attorneys could not be faulted for not challenging the CBLA evidence:

With CBLA, ineffective assistance is not a legitimate argument. The questions concerning the reliability of that science didn't even surface until long after Mr. Kulbicki's trial. The reputation for reliability of the FBI laboratories, which performed the analysis in this case, was well known and there is no evidence in this record to demonstrate they could have been effectively challenged at trial. And the undisputed evidence was that no private laboratories routinely performed this service at that time. Thus counsel was faced with the unquestioned expert in this field, which was generally accepted as competent evidence at the time of trial. That expert was appropriately cross-examined. Counsel cannot reasonably be faulted concerning their approach to CBLA evidence at the time of trial.

The Court of Special Appeals affirmed in a reported opinion, without addressing Kulbicki's ineffective assistance of counsel claim as it related to Kulbicki's attorneys' exploration of CBLA evidence. *Kulbicki v. State*, 207 Md. App. 412, 450-53, 53 A.3d 361, 383-85 (2012). We granted certiorari to consider the following questions, which we have renumbered: ⁶

- 1. Does the failure of defense counsel to investigate or challenge the State's scientific evidence and failure to object to improper closing arguments suggesting guilt constitute ineffective assistance of counsel?
- 2. Does a conviction obtained through the use of scientific evidence that is later demonstrated to be unreliable, misleading, and inadmissible violate a defendant's guarantee of due process?

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⁶ Because we will conclude that Kulbicki is entitled to a new trial on the basis of ineffective assistance of counsel, we will not reach his remaining two questions, or the State's conditional cross-petition.

3. Does the use of perjured expert testimony by a State expert violate a defendant's due process rights when the perjured testimony involves the expert's qualifications and background?

Kulbicki v. State, 430 Md. 344, 61 A.3d 18 (2013). We also granted the State's conditional cross-petition to address the following question:

Did the Court of Special Appeals err in stating that the State is chargeable with the "knowing use of perjured testimony" where the falsity is unknown at the time of the testimony?

Id.

Kulbicki did not argue that his attorneys were ineffective for failing to challenge the State's CBLA evidence before the Court of Special Appeals and the intermediate appellate court did not address the issue. Ineffective assistance of counsel with respect to the CBLA evidence, moreover, was not addressed in Kulbicki's brief before us; during oral argument, however, after the State argued that the admission of CBLA evidence was not a due process violation because Kulbicki's attorneys should have been able to test the flawed assumptions upon which CBLA was based at trial, questions were raised by the Court regarding ineffectiveness of counsel.⁷

We shall hold that Kulbicki's attorneys rendered ineffective assistance when they failed to investigate and cross-examine the State's CBLA expert, Agent Ernest Peele, based

While, ordinarily, we will not reach an issue that has not been argued by the parties, we retain discretion to do so. *See* Rule 8-131. In *Braxton v. State*, 123 Md. App. 599, 633, 720 A.2d 27, 43 (1998), our brethren on the Court of Special Appeals opined that Rule 8-131 confers discretion to consider an issue "not raised by the parties on appeal," including in instances when the issue was "discussed at oral argument."

upon a report he co-authored in 1991, which presaged the flaws in CBLA evidence, and therefore, will reverse Kulbicki's conviction and order a new trial.⁸

The present case began when, during the course of a homicide investigation by the Baltimore County Police Department, a bullet was recovered from the victim's body. Thereafter, two bullet fragments were recovered from Kulbicki's vehicle in addition to six bullets taken from a handgun found in Kulbicki's home. The bullets were then analyzed by the FBI laboratory and the results were interpreted by Agent Ernest Peele, who testified for the State at Kulbicki's trial.

Agent Peele testified that the CBLA process permitted him to analyze the chemical composition⁹ of the lead contained within bullets and, using the chemical composition numbers, determine if the composition in the bullets were the same or substantially similar to each other. Based on the compositional similarities of the bullets he tested, Agent Peele drew a number of conclusions that purported to connect Kulbicki to the homicide.

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At Kulbicki's post-conviction hearing, both of his attorneys testified that they had no recollection as to their preparation with respect to the State's CBLA evidence. One lawyer testified that he did not recall whether he had "investigated or spoke with anyone regarding the field of CBLA and its validity"; or whether he "review[ed] any literature or articles on CBLA". Kulbicki's other attorney similarly testified that she did not recall whether they had considered calling "an expert on the area of . . . CBLA"; whether she had spoken with anybody "about the reliability of such evidence"; or whether she had met "with Peele personally prior to trial."

⁹ Agent Peele testified that he would look to the "quantity" of varying elements contained within the lead. Specifically, he asserted, the bullets were analyzed for six elements: copper, antimony, arsenic, bismuth, silver, and tin.

Agent Peele testified, first, that a bullet fragment taken from the victim's autopsy, designated "Q-1", and one of the bullet fragments taken from Kulbicki's truck, "Q-2", were "what you'd expect if you were examining two pieces of the same bullet":

[STATE'S ATTORNEY]: [W]hat conclusion did you draw, if any, when comparing Q-1 and Q-2, those two bullet fragments?

[AGENT PEELE]: Well, Q-1 and Q-2 have the same amounts of each and every element that we detected. To the extent that that's what you'd expect if you were examining two pieces of the same bullet, they are that close, two pieces of the same source.

[STATE'S ATTORNEY]: Uhm, I think in looking at your report you used the term analytically indistinguishable.

[AGENT PEELE]: Yes, sir. That's a term basically meaning we can see each and every element. We can see the same quantity of each and every element in two different pieces such that if we were to drop those pieces, all of the samples from each one of, each of Q-1 and Q-2 on the floor and, we would not be able to put them back into their respective sample they are that close together in composition.

Agent Peele then compared Q-6, one of the bullets recovered from the handgun, and the samples taken from the victim and Kulbicki's truck, stating that, compositionally, they were "extremely" and "unusually close" so that "there's some association" between the bullets:

[STATE'S ATTORNEY]: And what conclusions, if any, did you draw in comparing the compositional analysis or the composition of Q-6 in comparison to Q-1 and Q-2, which are the bullet fragments?

[AGENT PEELE]: Well, Q-6 is measurably different from Q-1 and Q-2 such that in the analytical process you can physically see that not all the elements have exactly the same composition. However, Q-6 is extremely close to Q-1 and Q-2. It is unusually close in that that's not what you'd expect, unless there's some association between the two groups.

In other words, Q-1 and Q-6, the amount of copper is slightly different and the amount of arsenic is slightly different. All the other elements are the same and, certainly, those are types of things that you wouldn't expect to occur unless there's some association, such as being made by the same manufacturer on or about the same time, that kind of association. They are close enough that I have seen those differences, even in the same larger piece

but, certainly, they are also different enough that I can't really include uhm [sic] as well as I would Q-1 and 2 to each other.

During re-direct, Agent Peele explained that, although it was not conclusive, the closeness in composition of the three bullets—the autopsy fragment, the truck fragment, and one of the bullets found in the handgun—was consistent with having originated from the same box of bullets, because in each box, he asserted, you would expect to find a number of distinct chemical compositions:

[STATE'S ATTORNEY]: [Y]our opinion was that as to Q-6, it's that one bullet, when compared to fragments, I think your term was unusually close, extremely close in composition?

[AGENT PEELE]: Yes, sir.

* * *

[STATE'S ATTORNEY]: [W]ould you expect to see differences in the composition of bullets from the same box, or are all bullets from the same box exactly the same?

[AGENT PEELE]: Certainly not.

[STATE'S ATTORNEY]: Okay. Just explain that. I think you already answered. Just explain about the bullets in a box, how they can be different and you would expect them to be different.

[AGENT PEELE]: Yes, sir. Even in one box of ammunition, a box of 50 rounds of ammunition, the bullets in that box don't all have the same composition. Normally even in one box you'll have groups. For instance, 25 of the bullets may have the same composition such that it would have the same, that group would have the same amounts of each and every element measured. Another group would have a different composition - - by different, something that was measurably different in one or more elements. Maybe all of the elements could be slightly different which would constitute, then, a second group.

This group, again, would have a number of bullets in it or it could have a number of bullets in it all the way from one up to - - if the box only had two compositions and the first one had 25, this one would then have 25, as well. But, normally, there are several compositions in a box. Around five. Especially in Remington ammo, there are fi-, normally five compositions even in one box, and those compositions differ from each other by varying amounts. The differences that I see, even in one box, certainly are no more

than the differences that I see right here. So all these bullets at one time could have been in the same box. I'm not saying they were because they are different. And those differences may have been in the box; they may not have been but, certainly, these differences are not too great that all of them could not have been in the same box at one time –

(emphasis added).

Kulbicki's defense counsel cross-examined Agent Peele regarding the analysis that he performed in the case, which had been documented in a report provided to them pretrial. Using the report, counsel questioned Agent Peele, primarily, regarding his conclusions related to the similarities in chemical composition amongst the varying samples. Based upon a number of questions posed by defense counsel, Agent Peele testified that, in his report, he had "grouped" the bullets based on the similarity of their composition, and placed four of the bullets taken from Kulbicki's handgun, Q-5 through Q-8, in a separate "grouping" than the bullet found in the victim, indicating that there were differences in their compositions:

[COUNSEL FOR KULBICKI]: Okay. Now, you've testified on the second, on Page Two of your report, you have two groups listed within Group I and Group II, correct.

[AGENT PEELE]: Yes, sir.

[COUNSEL FOR KULBICKI]: And Group I you list that Q-1 and Q-2 essentially have the same compositional components.

[AGENT PEELE]: That's correct.

[COUNSEL FOR KULBICKI]: Okay. You've testified that Q-6 could be similar, but it's measurably different.

[AGENT PEELE]: Q-6 has very similar composition, has a very similar overall composition with slight differences in two of the elements, yes, sir.

[COUNSEL FOR KULBICKI]: But you didn't list that in your report under Group I?

[AGENT PEELE]: No, sir, I did not. I included only those that were exact. [COUNSEL FOR KULBICKI]: And as far as specimens Q-5, Q-6, Q-7 and Q-8, you determined that they belonged in neither group?

[AGENT PEELE]: Correct. They are all, they all have differences from what appears in Groups I and, II.

[COUNSEL FOR KULBICKI]: Okay. The differences were so great that they could not be linked to either group, correct?

[AGENT PEELE]: The differences were enough so that they were not put in any group, yes, sir.

(emphasis added).

During closing argument and rebuttal, the State seized on the CBLA testimony to argue that Kulbicki's truck was the scene of the murder, and moreover, that Kulbicki's handgun was the murder weapon. Specifically, the State argued that the "two bullet fragments, the one from [the victim's] head, the one in the Defendant's truck, are the same You can't tell one from the other." Likewise, the State argued to the jury that the bullet found in Kulbicki's handgun was compositionally the same as the bullet found inside of the victim:

Even more interesting is Agent Peele's examination of the bullets that he found inside that gun. Remember when he was talking about that Q-6, the Q-6 bullet and he said, I examined that compositionally. That Q-6 bullet is very nearly identical to the two bullet fragments, the one come coming from [the victim's] head and the one coming from the autopsy. Very close in composition in parts per million. Not exact. He did not say it was exactly identical; he said it was very nearly close when he broke it down into parts per million. Now, think about this. Out of all the billions of bullets in this world, is this just a coincidence that that bullet ends up in the Defendant's off-duty weapon? Is, is that just a coincidence? I don't think so.

(emphasis added). During closing argument, on behalf of Kulbicki, however, counsel never seriously challenged the State's arguments regarding the CBLA evidence, aside from asserting that none of the compositional numbers "match up too closely":

[W]hat we did was, when Agent Peele was testifying and we looked at his notes, you'll see the different calculations. And, no, none of uhm [sic] match up too closely. I'm not an expert on bullets but, as you'll see, there's all different sorts of numbers on there. All different sorts of numbers.

The State's CBLA evidence, therefore, was central to the State's case. Defense counsel sought to undermine Agent Peele's conclusions by questioning the compositional similarities or lack thereof among the various bullet fragments, but failed to explore, in any way, one of the fundamental assumptions of CBLA, which is that compositional sameness established an association among the bullets that were tested. Is this lapse significant for purposes of a claim for ineffective assistance of counsel?

Claims for ineffective assistance of counsel are evaluated under the United States Supreme Court's decision in *Strickland v. Washington*, 466 U.S. 668, 104 S.Ct. 2052, 80 L.Ed.2d 674 (1984). Under *Strickland*, our analysis is two-fold: we must decide whether counsel rendered constitutionally deficient performance and whether such deficient performance prejudiced the defendant's case. *Id.* at 687, 104 S.Ct. at 2064, 80 L.Ed.2d at 693. In discerning whether performance was deficient, we start with the presumption that counsel "rendered adequate assistance and made all significant decisions in the exercise of reasonable professional judgment" and our review of counsel's performance is "highly deferential." *Bowers v. State*, 320 Md. 416, 421, 578 A.2d 734, 736 (1990); *Strickland*, 466 U.S. at 690, 104 S.Ct. at 2065, 80 L.Ed.2d at 694. Applying this framework, we look to whether counsel's "representation fell below an objective standard of reasonableness." *Harris v. State*, 303 Md. 685, 697, 496 A.2d 1074, 1080 (1985). We assess reasonableness,

moreover, at "the time of counsel's conduct." *Strickland*, 466 U.S. at 690, 104 S.Ct. at 2066, 80 L.Ed.2d at 695.

Evaluating the reasonableness of an attorney's conduct "spawns few hard-edged rules", *State v. Borchardt*, 396 Md. 586, 604, 914 A.2d 1126, 1136 (2007), but a number of principles have emerged that are relevant to the matter before us. In the course of representing a client, an attorney must make decisions on the basis of adequate investigation and preparation. *See Coleman v. State*, 434 Md. 320, 338, 75 A.3d 916, 927 (2013). This obligation extends with equal force to forensic evidence; "[f]ailure to investigate the forensic evidence is not what a competent lawyer would do." *Bowers*, 320 Md. at 434, 578 A.2d at 743. We have also recognized that the failure to conduct an adequate cross-examination may be a basis for finding deficient performance under *Strickland. See id.*

The United States Court of Appeals for the Eighth Circuit has specifically recognized that the failure to properly investigate forensic methodology and adequately cross-examine a State's forensic expert may be a basis for deficient performance. In *Driscoll v. Delo*, 71 F.3d 701, 704 (8th Cir. 1995), Driscoll was charged with the murder of a corrections officer that occurred during a prison riot. The State argued that the murder had been committed with the use of a homemade knife that Driscoll had constructed while he was incarcerated. *Id.* at 707. At trial, the State presented the testimony of Dr. Su, the Chief Forensic Serologist with the Missouri Highway Patrol Crime Laboratory, whose report indicated that pursuant to a blood-identification test called the "thread" test, the victim's blood-type, type O, was not found on the knife; Dr. Su testified, however, that the

lack of the victim's blood could be attributed to the presence of type-A blood from another victim, which, she argued, could have "masked" the presence of the type O blood. *Id.* at 707. Defense counsel never questioned Dr. Su about whether she had performed any other blood-identification tests on the knife. *Id.* It was discovered during the post-conviction proceedings that Dr. Su had in fact performed another test, the "lattes" test, which, unlike the thread test, prevented masking from occurring. *Id.* at 707-08. The results of the lattes test revealed that there was no type O blood on Driscoll's knife, but the existence of the lattes' result was not brought out in cross-examination, so that the jury was left with the impression that Driscoll's "knife likely had been exposed to both type A and type O blood." *Id.* at 708.

On appeal, the Eighth Circuit considered the issue of "whether defense counsel's performance in failing to investigate and to adequately cross-examine Dr. Su about the serology tests performed on the state's evidence fell below an objectively reasonable standard of representation" and concluded that it had. *Id.* The court opined that Dr. Su's report should have alerted counsel to the "possibility of conclusively detecting both A and O on the same item of evidence", because the report indicated that both types of blood were found on the victim's boots. *Id.* at 709 (emphasis omitted). Given the serious charges that Driscoll faced as well as the significance to the State of proving that the victim's blood appeared on the alleged murder weapon, counsel's failure "to prepare for the introduction of the serology evidence, to subject the state's theories to the rigors of adversarial testing, and to prevent the jury from retiring with an inaccurate impression that the victim's blood

might have been present on the defendant's knife" fell "short of reasonableness under the prevailing professional norms." *Id*.

The failure, then, to appropriately investigate the State's forensic evidence and challenge the State's expert on cross-examination regarding a scientific method used to implicate the defendant may be a predicate upon which a claim for ineffective assistance of counsel may prevail. The Circuit Court Judge in the instant case, however, cognizant of the principle that counsels' performance must be assessed at the time of Kulbicki's trial, concluded that, "[w]ith CBLA, ineffective assistance is not a legitimate argument", because, she reasoned, "questions concerning the reliability of that science didn't even surface until long after Mr. Kulbicki's trial." We disagree.

In 1991, four years prior to Kulbicki's trial, Agent Peele and a number of his colleagues published a report which presaged the very flaw that ultimately lead us to conclude in *Clemons* that CBLA evidence was invalid and unreliable—the faulty assumption that bullets produced from different sources of lead would have a unique chemical composition. *See* Ernest R. Peele et al., *Comparison of Bullets Using the Elemental Composition of the Lead Component* in *Proceedings of the International Symposium on the Forensic Aspects of Trace Evidence* 61 (June 24-28, 1991) (hereinafter "the 1991 Peele Report"). The study focused on the "compositional variability of bullet leads from four major U.S. Manufacturers", with the goal of defining "the variability in element composition within individual bullets, among bullets within boxes of cartridges, among boxes packaged on the same date, among boxes packaged on different dates, and among boxes from the different manufacturers." *Id.* at 57. To that end, Agent Peele and

his colleagues analyzed the elemental composition of cartridges contained within full boxes of four different brands of .38 caliber cartridges—Cascade Cartridge Industries, Federal, Remington, and Winchester. *Id.* at 58.

The 1991 Peele Report observed, with respect to the Federal-brand cartridges, that, of the four boxes of Federal-brand cartridges that were tested, "three boxes contain[ed] two distinct compositional groups." *Id.* at 61. Significantly, the box identified as "box two" had "overlapping compositions" with boxes one and four, but had been packaged *fifteen months earlier*. *Id.* at 61.¹⁰ The authors did not conduct any further research to explain the existence of overlapping compositions, but speculated as to a number of explanations, including that it was a "coincidence"; "because the bullets originated from the same analytically homogenous source of lead"; or "the cartridges were produced from a common lead production source and component storage before cartridge loading":

There are two possible explanations for the overlapping compositions for bullets packaged on different dates. Overlapping compositions occur either by coincidence or because the bullets originated from the same analytically homogenous source of lead. From our previous experience and discussion with Federal Cartridge Corporation representatives, a reasonable explanation for multiple boxes containing indistinguishable lead compositions is that the cartridges were produced from a common lead production source and component storage before cartridge loading.

Id. at 61-62.

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¹⁰ Two boxes, designated boxes one and four, also had overlapping compositions, but that was attributed to the fact that they had "the same production and packaging date." The 1991 Peele Report, at 61.

The failure to fully explore the variance, however, is at odds with the scientific method, as we explained in *Blackwell v. Wyeth*, 408 Md. 575, 583, 971 A.2d 235, 240 (2009):

Once data is compiled, analysis occurs, from which conclusions are drawn; the hypothesis either remains viable or is disproven:

Note that a hypothesis or a theory is never proven or confirmed to be true. Testing is capable only of disconfirming. But theories that withstand such attempts at falsification better and longer become accepted, at least until something better comes along. The opposite approach can readily be seen in non-scientific activities of numerous kinds, where investigators engage in a search for evidence that confirms their suspicions. This confirmatory bias is based on the erroneous assumption that a theory is confirmed by the accumulation of facts consistent with the theory.... It is the diligent search for inconsistencies, for falsification, that really puts a theory to the test. A theory that can withstand such scrutiny is one that deserves credence.

Id. at 583, 971 A.2d at 240, quoting David L. Faigman, Michael J. Saks, Joseph Sanders & Edward K. Cheng, 1 Modern Scientific Evidence: The Law and Science of Expert Testimony, at 264 (2008). The speculation proffered by the 1991 Peele Report regarding the overlapping compositions is consistent with "confirming suspicions", rather than withstanding attempts at falsification.¹¹

As an illustration of forensic application of this approach, let us take an example of one bullet removed from a victim, five cartridges from a revolver, and 44 cartridges from a box associated with the suspect. Each bullet component of all these specimens is analyzed The composition of the bullet from the victim is analytically indistinguishable in all five

(continued...)

¹¹ The 1991 Peele Report, additionally, using a hypothetical, asserted that CBLA remained viable:

The 1991 Peele Report, however, called into question the assumption that no two sources of lead would ever produce bullets with the same chemical composition, as the 1991 Peele Report clearly indicated that two bullets produced fifteen months apart had the same composition. The Report, moreover, was published on June 24, 1991 and was available to Kulbicki's attorney in 1995. When Agent Peele was cross-examined, the 1991 study authored by him was never exhumed; the potential for having two bullets with the same composition produced at different times was never explored, even though opportunity knocked. During his re-cross examination, Agent Peele, rather, testified that

elements determined from two bullets from the gun and twenty from the box. Two more bullets from the gun are compositionally indistinguishable from 10 others from the box. The last bullet from the gun is compositionally indistinguishable from seven others from the box. The seven remaining bullets from the box fall into two additional compositional groups. It is our opinion that these results are forensically significant in associating the victim, weapon, and suspect in this example.

Id. at 68. This, too, is inconsistent with the scientific method, as it failed to account for a flawed assumption that would undermine the hypothesis that compositional sameness implied association.

^{(...}continued)

The compilation, in which the 1991 Peele Report appears, *Proceedings of the International Symposium on the Forensic Aspects of Trace Evidence*, was distributed to various public libraries in 1994. According to the *Catalog of U.S. Government Publications*, the compilation was distributed to depository libraries in "Shipping list no.: **94**-0833-M", indicating that it was distributed in 1994. *See Catalog of U.S. Gov't Publications*, U.S. Gov't Printing Office, http://catalog.gpo.gov/ (search "Proceedings of the International Symposium on the Forensic Aspects of Trace Evidence", then follow hyperlink entitled "Proceedings of the International Symposium on the Forensic Aspects of Trace Evidence [microform]: June 24-28, 1991, Forensic Science Research and Training Center, FBI Academy, Quantico, Virginia /") (last visited August 20, 2014) (emphasis added).

he would not expect a random bullet to match any of the bullets derived from the crime scene or Kulbicki's handgun:

[KULBICKI'S COUNSEL]: Isn't it true that if I gave you a Reming--, a Remington bullet at this time, the results could be similar to any of those as in Q-1 through Q-9?

[AGENT PEELE]: I would not expect, if you hand me a Remington bullet right now, that it would be the same as any one of these, no, sir.

[KULBICKI'S COUNSEL]: I didn't say the same. But it could be similar, correct?

[AGENT PEELE]: Well, it's gonna be similar in that it's going to have more than likely measurable amounts of all these elements, . . . except tin; it probably will not have that. So in that respect, yes, it's going to be similar.

(emphasis added).

Had Kulbicki's attorneys investigated and discovered the 1991 Peele Report, they would have had a potent challenge to Agent Peele's conclusion that the bullet fragment taken from the victim's autopsy and the fragment found in Kulbicki's truck was "what you'd expect if you were examining two pieces of the same bullet . . . two pieces of the same source", as well as the conclusion that a bullet taken from Kulbicki's handgun and the bullet taken from the autopsy were similar enough, so that "there's some association between the two groups." Kulbicki's counsel, then, would have been able to posit the

I don't find that to be a valid observation, expectation. There are no data on (continued...)

William Tobin, a former FBI examiner, testified at Kulbicki's post-conviction hearing, challenging the conclusions Agent Peele offered at Kulbicki's 1995 trial. With respect to Agent Peele's testimony that the bullet taken from the victim's body and one of the bullets taken from Kulbicki's truck were "what you'd expect if you were examining two pieces of the same bullet", Mr. Tobin testified that:

likelihood that the chemical composition of the bullet found in the victim could have matched other bullets, not analyzed by the FBI.

Kulbicki's attorneys' failure to appropriately investigate the 1991 Peele Report and to challenge the State's scientific evidence on cross-examination at trial, thus, fell short of prevailing professional norms. Given the serious nature of the charges Kulbicki was facing, along with the fact that CBLA was so persuasively used to connect Kulbicki to the alleged murder scene and murder weapon, it was incumbent on Kulbicki's attorneys "to subject the state's theories to the rigors of adversarial testing". *See Driscoll*, 71 F.3d at 709. Having failed to research what Agent Peele had published about the forensic evidence about which he was testifying and having also failed to conduct an adequate cross-examination rendered Kulbicki's counsels' performance inadequate.¹⁴

(...continued)

which to have such an expectation. In other words, there has never been any meaningful or comprehensive research or studies to substantially support such an expectation.

Regarding Agent Peele's testimony in which he opined that there was an unusually close compositional similarity to the bullet fragments found in Mr. Kulbicki's truck and in the victim, Mr. Tobin testified:

That is a meaningless characterization. There is no scientific foundation or validity to be able to make that type of characterization. I mean, there existed a statistical protocol by which to declare a match or non-match. So this is gobbledygook. Either use the protocol and - - the analyst should have used the protocol that existed to declare a match.

We recognize that courts from other jurisdictions have concluded that attorneys did not render ineffective assistance for failing to challenge the State's CBLA evidence. In many of those cases, however, defense counsel actually did challenge the flawed assumption (continued...)

Our next inquiry, then, is whether Kulbicki's attorneys' failure to adequately cross-examine Agent Peele and to challenge the faulty assumptions upon which Agent Peele's opinion was based prejudiced Kulbicki's case. *Strickland*, 466 U.S. at 687, 104 S.Ct. at 2064, 80 L.Ed.2d at 693. To prevail on the prejudice prong, there must be a showing that the deficient performance created a "substantial possibility" that, but for counsel's errors,

(...continued)

regarding the uniqueness of the lead sources from which the bullets were derived, which Kulbicki's attorneys did not do. *See United States v. Higgs*, 663 F.3d 726, 739 (4th Cir. 2011) (observing that trial counsel "impeach[ed] the uniqueness and homogeneity of lead melts, as well as the overall probative value of the CBLA evidence"); *United States v. Davis*, 406 F.3d 505, 509 (8th Cir. 2005) (noting that defense counsel offered the testimony of another CBLA expert who observed that the State's expert had not "test[ed] the composition of other bullets available in the community to see if he could find other analytically indistinguishable bullets"). In other cases, the 1991 Peele Report, which was not published before June 24, 1991, was not available to defense counsel. *See Smith v. Sec'y, Dep't of Corr.*, 572 F.3d 1327, 1350 (11th Cir. 2009) (1990 trial); *Libby v. McDaniel*, 2011 WL 1301537 (D. Nev. 2011) (1990 trial); *Wyatt v. State*, 71 So. 3d 86, 100 (Fla. 2011) (noting that in the 1991 trial "the flaws inherent in CBLA science were unknown or not publically acknowledged at the time of trial.") ("*Wyatt P*"); *Wyatt v. State*, 78 So. 3d 512, 533 (Fla. 2011) (1991 conviction, adopting the same rationale as *Wyatt I*).

We note, also, that counsels' performance regarding the CBLA evidence and Agent Peele cannot be justified as strategic, because it was not "founded 'upon adequate investigation and preparation." *Coleman v. State*, 434 Md. 320, 338, 75 A.3d 916, 927 (2013), quoting *State v. Borchardt*, 396 Md. 586, 604, 914 A.2d 1126, 1136 (2007). Because Kulbicki's attorneys did not refer to the 1991 Peele Report, they could not have made a rational and informed decision as to the scope of their cross-examination of Agent Peele. *See id.*; *see also Foster v. Lockhart*, 9 F.3d 722, 726 (8th Cir. 1993) ("Before an attorney can make a reasonable strategic choice against pursuing a certain line of investigation, the attorney must obtain the facts needed to make the decision. An attorney's strategic choices made after less than complete investigation are reasonable precisely to the extent that reasonable professional judgments support the limitations on investigation." (internal citations and quotations omitted)).

the outcome may have been different. *Bowers*, 320 Md. at 425-27, 578 A.2d at 738-39. We recently elucidated the "substantial possibility" standard in *Coleman v. State*, 434 Md. 320, 75 A.3d 916 (2013), in which we opined:

As to the prejudice prong of *Strickland*, which addresses whether an attorney's deficient performance prejudiced the defendant, "[t]he defendant must show that there is a reasonable probability that, but for counsel's unprofessional errors, the result of the proceeding would have been different. A reasonable probability is a probability sufficient to undermine confidence in the outcome." Strickland, 466 U.S. at 694, 104 S.Ct. at 2068, 80 L.Ed.2d at 698; see also Taylor v. State, 428 Md. 386, 399–400, 51 A.3d 655, 662 (2012). In Oken, we explained that the petitioner must show "that there is a substantial possibility that, but for counsel's unprofessional errors, the result of the proceeding would have been different." 343 Md. at 284, 681 A.2d at 44. This Court has noted that "[a] proper analysis of prejudice ... should not focus solely on an outcome determination, but should consider 'whether the result of the proceeding was fundamentally unfair or unreliable." "Oken, 343 Md. at 284, 681 A.2d at 44 (quoting Lockhart v. Fretwell, 506 U.S. 364, 369, 113 S.Ct. 838, 842, 122 L.Ed.2d 180, 189 (1993)); see also Strickland, 466 U.S. at 687, 104 S.Ct. at 2064, 80 L.Ed.2d at 693 (explaining that, in determining prejudice, it is important to consider whether the trial's result was reliable).

Id. at 340-41, 75 A.2d at 928.

We have frequently recognized the significance jurors afford to forensic evidence in assessing a defendant's guilt or innocence. *See Clemons*, 392 Md. at 347 n.6, 896 A.2d at 1064 n.6 (noting that "jurors tend to give considerable weight to 'scientific' evidence when presented by 'experts' with impressive credentials", quoting *Reed v. State*, 283 Md. 374, 386, 391 A.2d 364, 370 (1978)). The importance of the CBLA evidence to the instant matter, moreover, cannot be overstated. Agent Peele testified that the bullet fragments found in Kulbicki's truck and in the victim were "what you'd expect if you were examining two pieces of the same bullet . . . two pieces of the same source". Likewise, Agent Peele testified that an unfired cartridge taken from Kulbicki's handgun, while not analytically

indistinguishable from the bullet taken from the victim's autopsy, was "unusually close in that that's not what you'd expect, unless there's some association between the two groups."

The State's closing argument relied on forensic evidence to connect Kulbicki to the homicide: "Because we don't have any witnesses who actually saw the Defendant put the gun to [the victim's] head, we fill in the gaps. And the way we fill them in is with forensic science." (emphasis added). The State, more specifically, relied in closing on Agent Peele's CBLA analysis, asserting that "those two bullet fragments, the one from [the victim's] head, the one in the Defendant's truck, are the same You can't tell one from the other." Additionally, the State argued to the jury that the bullet found in Kulbicki's handgun was likely the same bullet found inside of the victim: "Even more interesting is Agent Peele's examination of the bullets that he found inside that gun. . . . Now, think about this. Out of all the billions of bullets in this world, is this just a coincidence that that bullet ends up in the Defendant's off-duty weapon? Is, is that just a coincidence? I don't think so."

Given the State's rigorous reliance on CBLA evidence to connect Kulbicki to the crime, we conclude that there was a "substantial possibility" that the outcome would have been different had Kulbicki's counsel questioned Agent Peele regarding the possibility of having compositionally similar bullets exist in different batches. Having concluded that both prongs of *Strickland* have been satisfied, we hold that the Circuit Court erred in

Although the Circuit Court Judge concluded that Kulbicki was not entitled to post-conviction relief, she also noted the significance of the CBLA evidence, opining that,

"[c]learly the bullet analysis was central to the theory of the prosecution."

concluding that Kulbicki's attorneys had not rendered ineffective assistance of counsel, and thus, remand for a new trial.¹⁶

OF THE **COURT** JUDGMENT OF SPECIAL APPEALS REVERSED: CASE REMANDED TO THAT COURT WITH DIRECTIONS TO VACATE THEJUDGMENT OF THE CIRCUIT COURT **FOR BALTIMORE COUNTY** AND REMAND THE CASE TO THE CIRCUIT COURT FOR A NEW TRIAL. COSTS IN THIS COURT AND IN THE COURT OF SPECIAL APPEALS TO BE PAID BY **BALTIMORE COUNTY.**

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A limited remand in the instant case is unnecessary because both of Kulbicki's attorneys were questioned substantially regarding their investigation and strategy with respect to the CBLA evidence, of which they had no recollection.

There may be instances in which a limited remand is the more appropriate remedy for errors committed by post-conviction courts on claims based on ineffective assistance of counsel. For example, in *State v. Thomas*, 325 Md. 160, 599 A.2d 1171 (1992), the petitioner, Thomas, had alleged that post-conviction relief was appropriate because his attorney rendered ineffective assistance of counsel by permitting Thomas to be interviewed by a State psychiatrist before sentencing without an attorney. The State argued that the decision was a strategic one, and thus, did not constitute deficient performance. We observed, however, that the post-conviction court did not permit Thomas's attorney to testify as to prior psychiatric assessments of Thomas, and therefore, we were not equipped to discern whether such a decision could be attributed to strategy. Accordingly, we remanded the case for further proceedings.

Circuit Court for Baltimore County Case No. K-93-530

Argued: October 3, 2013

$\frac{\hbox{IN THE COURT OF APPEALS}}{\hbox{OF MARYLAND}}$

No. 13

September Term, 2013

JAMES KULBICKI

v.

STATE OF MARYLAND

Harrell
Battaglia
Greene
Adkins
McDonald
Eldridge, John C. (Retired,
Specially Assigned)
Rodowsky, Lawrence F.
(Retired, Specially
Assigned),

JJ.

Dissenting Opinion by McDonald, J. which Harrell and Rodowsky, JJ., join

Filed: August 27, 2014

This is a troubling case – for many reasons. A jury concluded that Petitioner James Kulbicki, a police officer, murdered, execution-style, a young woman with whom he had had an extra-marital affair and by whom he had fathered a child.¹ The evidence supporting that verdict – eyewitness, circumstantial, and forensic – was compelling.² But that evidence was not flawless. The analysis that supported one part of the prosecution's forensic evidence at trial was determined, many years later, not to meet the standard for the use of scientific evidence at trial.

The Majority opinion reverses Mr. Kulbicki's conviction on the basis that his trial counsel failed to anticipate that development and thereby provided ineffective assistance of counsel in their cross-examination of the prosecution's forensic expert on "comparative bullet lead analysis" ("CBLA")³ – a ground not briefed by either party in this appeal and not among the questions on which we granted the writ of certiorari in this case.⁴

¹This was the second jury to reach that conclusion. Mr. Kulbicki's initial conviction at a 1993 trial was reversed by the Court of Special Appeals on the ground that the Circuit Court should have permitted Mr. Kulbicki to present certain evidence on surrebuttal. 102 Md. App. 376, 649 A.2d 1173 (1994).

²See pp. 13-15 below.

³Some refer to this analysis as "compositional analysis of bullet lead" and use the acronym "CABL." *See* National Research Council, Forensic Analysis: Weighing Bullet Lead Analysis (2004). For the sake of consistency, I will use the acronym adopted by the parties and used by the Majority opinion to denote this type of evidence.

⁴Mr. Kulbicki's very competent post-conviction counsel did argue that the admission of the CBLA evidence violated due process and also suggested that developments concerning CBLA subsequent to his trial should be treated as newly discovered evidence that could be a basis for vacating his conviction under Maryland Code, Criminal Procedure Article ("CP"), §8-301. However, the Majority opinion does not base its decision on either of those grounds.

A criminal defendant's right to the effective assistance of counsel is rooted in the Sixth Amendment to the federal Constitution and Article 21 of the Maryland Declaration of Rights.⁵ In order to obtain relief on the ground that his right to effective assistance of counsel was violated, Mr. Kulbicki bears the burden of showing (1) that defense counsel's performance was deficient and (2) that the deficient performance prejudiced him. Strickland v. Washington, 466 U.S. 668, 687 (1984). The Majority opinion briefly and accurately recites the principles that govern application of those two prongs. But it does not suffice to recite those criteria. A court must apply them. The Majority opinion does not. First, contrary to the principles outlined by the Supreme Court in Strickland, the Majority opinion uses information developed long after Mr. Kulbicki's 1995 trial, and not available until years later, to find trial counsel's performance deficient in hindsight. Second, again contrary to Strickland, the Majority opinion makes no effort to assess the alleged deficiency in light of the other evidence against Mr. Kulbicki that was unaffected by the alleged deficiency.

Whether Trial Counsel's Performance was Deficient

To establish that his trial counsel's performance was deficient, Mr. Kulbicki must demonstrate that it fell below an objective standard of reasonableness under prevailing professional norms. *Strickland*, 466 U.S. at 688. Judicial review of defense counsel's

⁵This Court has held that the federal and State constitutional provisions are coextensive. *Lodowski v. State*, 307 Md. 233, 247, 513 A.2d 299 (1986). Thus, Maryland courts apply the standards set forth in *Strickland* in judging claims for post-conviction relief on the ground of ineffective assistance of counsel. *See, e.g., Coleman v. State*, 434 Md. 320, 334, 75 A.3d 916 (2013).

performance is to be "highly deferential" and "a court must indulge a strong presumption that counsel's conduct falls within the wide range of reasonable professional assistance." *Id.* at 689; *see also Evans v. State*, 396 Md. 256, 274-75, 914 A.2d 25 (2006). Especially pertinent to this case, the reasonableness of counsel's performance must be assessed "as of the time of counsel's conduct." *Strickland*, 466 U.S. at 690. In other words, this prong is satisfied only when, "given the facts known at the time, counsel's choice was so patently unreasonable that no competent attorney would have made it." *State v. Borchardt*, 396 Md. 586, 623, 914 A.2d 1126 (2007) (internal citations omitted).

The Majority opinion holds that Mr. Kulbicki's trial counsel were ineffective because they failed to locate and make use of research concerning CBLA to discredit the forensic value of CBLA evidence generally. At the time of Mr. Kulbicki's trial in 1995, CBLA had been used in criminal trials for nearly 30 years without serious challenge. It is true that this Court ultimately determined that CBLA evidence failed to satisfy the *Frye-Reed* standard for the admission of scientific evidence in Maryland courts. But that decision was not issued until more than a decade after Mr. Kulbicki's trial. *Clemons v. State*, 392 Md. 339, 896 A.2d 1059 (2006). Obviously, Mr. Kulbicki's trial counsel were not deficient in failing to rely on that case. Nor, as of 1995, had any other reported case held such evidence inadmissible.

⁶CBLA was apparently first developed as part of the investigation of the assassination of President John F. Kennedy. *See* P. C. Giannelli, *Comparative Bullet Lead Analysis: A Retrospective*, 47:2 Crim. L. Bull., Art. 6 (2011).

⁷The reported opinions in which CBLA evidence has been determined to be (continued...)

Nor can the Majority opinion fault Mr. Kulbicki's trial counsel for failing to find and use the various scholarly articles and reports critical of CBLA cited and quoted at length in the *Clemons* decision. They did not exist in 1995. The key articles that questioned the use of CBLA evidence, including those cited in *Clemons*, were not published until 2002 at the earliest, seven years after Mr. Kulbicki's second trial. *See Clemons*, 392 Md. at 363-72. Those articles spurred the FBI to commission the National Research Council ("NRC") of the National Academy of Sciences to conduct a comprehensive review of CBLA evidence. The definitive NRC Report did not appear until 2004, nearly a decade after Mr. Kulbicki's trial. The NRC Report found that the scientific techniques used to analyze the composition of bullets were sound, but that some inferences drawn from the composition analysis as to the

inadmissible were issued more than 10 years after Mr. Kulbicki's 1995 trial and concerned trials that occurred after the publication of reports critical of CBLA in the early 2000s. *See Clemons v. State, supra* (2002 trial; 2006 appellate opinion); *Ragland v. Commonwealth,* 191 S.W.3d 569 (Ky. 2006) (2002 trial; 2006 appellate opinion). To the extent that CBLA evidence was challenged prior to Mr. Kulbicki's trial, courts had held that the evidence was admissible. *See Jones v. State,* 425 N.E. 2d 128 (Ind. 1981); *State v. Krummacher,* 523 P.2d 1009 (Ore. 1974). Indeed, in re-cross-examination of the prosecution's expert in his case, Mr. Kulbicki's counsel was able to elicit the same point emphasized by the dissent in the *Jones* case – that any of a large number of bullets manufactured by the same maker might be "similar" in composition. 425 N.E.2d at 135.

⁸See R.D. Koons, et al., Compositional Variation in Bullet Lead Manufacture, 47 J. Forensic Sci. 950 (2002); E. Randich, et al., A Metallurgical Review of the Interpretation of Bullet Lead Compositional Analysis, 127 Forensic Sci. Int'l 174 (2002); W. Tobin & W. Duerfeldt, How Probative is Comparative Bullet Lead Analysis? 17 Crim. Just. 26 (2002); E. Imwinkelried & W. Tobin, Comparative Bullet Lead Analysis (CBLA) Evidence: Valid Inference or Ipse Dixit?, 28 Okla. City U. L. Rev. 43 (2003); W. Tobin, Comparative Bullet Lead Analysis: A Case Study in Flawed Forensics, The Champion 12 (July 2004).

source of particular bullets or fragments were unwarranted. Although the NRC Report did not recommend against the use of CBLA evidence, the FBI ultimately decided to cease providing CBLA testimony in 2005. In any event, these developments occurred long after Mr. Kulbicki's trial.

Indeed, at the time of Mr. Kulbicki's trial, the individual widely credited with blowing the whistle on the failings of CBLA – former FBI examiner William Tobin – was still employed at the FBI, was three years away from retirement, and had yet to publish his doubts concerning that analysis. *See, e.g.,* P. Giannelli, *Comparative Bullet Analysis: A Retrospective*, 47 Crim. L. Bull. Art. (Spring 2011) ("[CBLA] was not seriously challenged until a retired FBI examiner, William Tobin, began questioning the procedure in scientific and legal journals and in court testimony as well") (footnotes omitted).¹⁰

The sole basis on which the Majority opinion finds trial counsel ineffective relates to a single research paper co-authored by six analysts from the FBI's laboratories in Washington D.C. and Quantico, Virginia, including Special Agent Ernest Peele, who testified as one of

⁹National Research Council, *Forensic Analysis: Weighing Bullet Lead Evidence* (2004) ("NRC Report"). The NRC Report concluded that the analytical techniques employed by the FBI laboratory to determine the composition of bullet lead samples led to sound results. The potential problem lay in the conclusions analysts drew from those results. In the view of the NRC Report, there was some danger that expert witnesses were drawing broader conclusions from the analysis than was warranted, such as assertions that two specimens came from the same box of ammunition. NRC Report at 91-94.

¹⁰Indeed, the critical passage from the *Clemons* opinion concerning three underlying premises of CBLA analysis that the Majority quotes, Majority slip op. at 1-2 n.2, is a virtually verbatim quotation of a 2004 article by Mr. Tobin. *See* W. Tobin, *Comparative Bullet Lead Analysis: A Case Study in Flawed Forensics*, The Champion 12 (July 2004).

of Bullets Using the Elemental Composition of the Lead Component (1991) ("FBI study" or "FBI research paper"). As an initial matter, it is not entirely clear that the FBI study was readily available outside the FBI at the time of the 1995 trial, even to the most diligent researcher. I have caused a copy of the FBI study, which is not available online, is still not

In a federal district court case concerning alleged discovery violations related to CBLA evidence, it was alleged that the FBI study was not publicly available at the time of a 1999 trial – a trial that occurred four years after Mr. Kulbicki's trial. Ultimately, the court did not resolve that question, given that a similar study had been published in 1999. See United States v. Higgs, 711 F. Supp.2d 479, 494 & n.5 (D. Md. 2010), aff'd, 663 F.3d 726, 738 (4th Cir. 2011).

In any event, the Majority's assumption that an attorney providing effective assistance of counsel in 1995 would necessarily have found this FBI research paper is highly speculative.

¹¹The Majority opinion refers to this study as the "Peele Report." In fact, Agent Peele was one of six co-authors listed on the study.

¹² The Majority provides a hyperlink to show that the FBI study was distributed to depository libraries sometime in 1994, although it is not clear when the article would have been cataloged at any particular library. Moreover, given that depository libraries may select, with some exceptions, the government documents they choose to receive, it is not entirely clear which libraries in the Baltimore vicinity would have had a copy of the FBI study at the time of Mr. Kulbicki's second trial. *See Amending Your Library's Selection Profile*, FDLP (August 19, 2014) http://www.fdlp.gov/requirements-guidance-2/guidance/10-amending-your-library-s-selection-profile. Obviously, Mr. Kulbicki's counsel would not have found a link to the article in the way that the Majority did. In 1995, public use of the Internet was in its infancy. Google did not yet exist. *See Internet Users*, Internet Live Stats (July 31, 2014), http://www.internetlivestats.com/internet-users/#trend (less than 1% of world population had access to Internet in 1995); *World Wide Web Timeline*, Pew Research Internet Project (July 31, 2014), http://www.pewinternet.org/2014/03/11/world-wide-web-timeline/ (as of 1995, 18 million Americans were online, but only 3% of that number had ever signed on to the world wide web).

easy to obtain, and does not otherwise appear in the record of this case, to be posted with this opinion on the "highlighted cases" portion of the Court's website. http://mdcourts.gov/coappeals/highlightedcases/index.html#kulbicki

Of course, assuming trial counsel could even locate the FBI research paper, what would they have done with it? The FBI study does not criticize the use of CBLA as a forensic tool. Indeed, the FBI study reports that 25 years of study of analytical data collected by the FBI has led to the conclusion that "if two bullets are produced from the same homogenous source of lead, then they will have analytically indistinguishable compositions." FBI study at 57. The goal of the study was to "define the variability in element composition within individual bullets, among bullets within boxes of cartridges, among boxes packaged on the same date, among boxes packaged on different dates, and among boxes from different manufacturers." Id. After summarizing the numerical results of the study, the paper concludes that CBLA provides useful forensic results. For example, it states that "when compositional overlap between boxes occurs, it is more reasonable to expect the overlap from boxes of the same types and brand of bullet, packaged near the same date." *Id.* at 68. The paper ends with a hypothetical example involving the use of CBLA evidence in a criminal case – involving facts very similar to Mr. Kulbicki's case – and concludes: "It is our opinion that these results are forensically significant in associating the victim, weapon, and suspect in this example." *Id.* A defense attorney who happened to locate the FBI study might reasonably decide that using it would be counter-productive to any effort to refute the CBLA evidence in Mr. Kulbicki's case.

The only use that the Majority opinion suggests that Mr. Kulbicki's counsel could have made of the paper was to point out that there might be overlapping compositions of bullets packaged on different dates. Majority slip op. at 14-19. In fact, the FBI study reported that, for two manufacturers – CCI and Remington – "there are no compositional group overlaps among bullets from boxes with different assembly and packaging dates." FBI study at 61. There were overlapping compositions for bullets packaged on different dates for one manufacturer – Federal – but the FBI study concluded that this was attributable to a common lead production source and component storage before loading by that manufacturer. *Id.* at 61-62. A more complex compositional group distribution finding for a fourth manufacturer was attributed to the same reasons. *Id.* at 62. After analyzing all of the data, the study concluded that "[c]ompositional group overlap among bullet leads are generally expected from boxes with the same assembly and packaging dates and not expected from boxes with widely different dates." *Id.* at 68.

In an apparent concession that the FBI study actually supports the use of CBLA evidence, the Majority opinion criticizes the FBI study as being "at odds with the scientific method" and "inconsistent with the scientific method." Majority slip op. at 16-17 & n.11. Although it is not entirely clear from the Majority opinion, it appears that the Majority believes that trial counsel should have located the FBI study in 1995, somehow used it to

discredit CBLA evidence generally during cross-examination of Agent Peele at Mr. Kulbicki's trial, and then simultaneously debunked the study's methods and conclusions as "inconsistent with the scientific method." This would have been a peculiar way to advance Mr. Kulbicki's defense. Whether or not the Majority's critique of the FBI study is valid, it is not the study that is under review here – it is defense counsel's performance at the 1995 trial.

The Majority opinion downplays the extent to which defense counsel actually cross-examined Agent Peele at trial about the CBLA evidence. Mr. Kulbicki's trial counsel cross-examined Agent Peele at some length and in detail concerning the CBLA analysis. He obtained concessions that there was no industry-wide standard for lead composition of bullets, that Agent Peele could not identify the manufacturer of any of the bullets in question, that any manufacturer would make many bullets, that bullets in one box of ammunition could have different compositions, that one of the bullets from Mr. Kulbicki's gun was similar to but "measurably different" from the bullet fragments from the autopsy and truck and that he could not be certain they had a common source, that the other bullets from Mr. Kulbicki's gun were so different from the bullet fragments that Agent Peele did not place them in the same "group," and that a random bullet handed to the Agent could have a "similar" composition to the bullet fragments and bullets he tested.

Although the cross-examination was not the precise critique of CBLA that was later made in academic articles and the NRC Report, defense counsel was able to point out that

the inferences drawn from composition analysis were not as rigorous as the composition analysis itself. And, in the end, Agent Peele's testimony was not inconsistent with the results reported in the FBI study. It is not at all clear what the use of that study by defense counsel during cross-examination would have added, other than to allow the prosecution to ask Agent Peele on re-direct about the conclusion of the FBI study that CBLA yielded forensically significant conclusions in murder cases.

The only post-conviction case concerning forensic evidence that the Majority cites in support of its decision actually illustrates how aberrational the Majority opinion is. See Majority slip op. at 12-14, discussing Driscoll v. Delo, 71 F.3d 701 (8th Cir. 1995). That case arose out of a prison riot during which two officers were stabbed, one fatally. Driscoll was charged with the stabbing that resulted in death. A key question at the murder trial concerned the absence of the murder victim's blood type – type O – on the defendant's knife. A serologist testified at trial that a particular test that she had performed would not detect type O blood if type A blood (which happened to be the blood type of the surviving victim) was also on the knife. The Eighth Circuit held that trial counsel had provided ineffective assistance of counsel in failing to ask the serologist whether she had performed another test that would have detected type O blood even in the presence of type A blood. The court noted that defense counsel asked only two questions of the serologist in cross-examination and that it was evident from the lab report defense counsel received in discovery that the serologist was able to detect both blood type A and blood type O together on other evidence. 71 F.3d

at 709. By contrast, in this case, Mr. Kulbicki's counsel cross-examined Agent Peele extensively, asking more than 70 questions (which was considerably more questions than the prosecutor asked on direct and re-direct examination combined), making use of the Agent's report to obtain concessions, and introducing exhibits. And there is no suggestion that Mr. Kulbicki's counsel received anything in discovery that provided any clue to the general flaws in CBLA analysis that were unearthed many years later.

There is no question that, as developments subsequent to Mr. Kulbicki's trial revealed, some inferences that had been drawn by FBI examiners from lead compositional analysis were seriously flawed. Whether an individual convicted at a trial at which such evidence was introduced should receive a new trial on the ground of newly-discovered evidence under the standards governing a writ of actual innocence (CP §8-301) is a serious question. But, in the context of a claim of ineffective assistance of counsel, the Majority fails to take into account the standard that we are to apply to trial counsel's performance. Our review of counsel's performance is to be "highly deferential" and must take account of the information available and facts known to counsel at the time of trial. Strickland, 466 U.S. at 689-90.¹³ To hold

^{13&}quot;[I]t is all too easy for a court, examining counsel's defense after it has proved unsuccessful, to conclude that a particular act or omission of counsel was unreasonable. A fair assessment of attorney performance requires that every effort be made to eliminate the distorting effects of hindsight, to reconstruct the circumstances of counsel's challenged conduct, and to evaluate the conduct from counsel's perspective at the time." *Strickland*, 466 U.S. at 689 (citations omitted). *See also State v. Calhoun*, 306 Md. 692, 735, 511 A.2d 461 (1986) ("There was no duty on counsel to foresee that we might hold as we held [subsequently concerning admissibility of certain evidence]").

that Mr. Kulbicki's 1995 trial counsel should have foreseen the subsequent developments with respect to CBLA analysis – most of which did not occur until the next decade – is to impose, in Judge Moylan's pithy phrase, an "obligation to prophesy." ¹⁴

Boiled down to its essence, the Majority opinion holds that Mr. Kulbicki's trial counsel should have discovered and unraveled the flaws in CBLA analysis before anyone else did by locating and using an obscure research paper – a paper that actually endorsed the use of CBLA to link a defendant to a crime involving a firearm, including murder cases in particular. That is simply not a basis on which to find that Mr. Kulbicki's trial counsel were deficient.

Whether There was Prejudice

To establish prejudice, Mr. Kulbicki "must show that there is a reasonable probability that, but for counsel's unprofessional errors, the result of the proceeding would have been different." *Strickland*, 466 U.S. at 694; *Denisyuk v. State*, 422 Md. 462, 470, 30 A.3d 914 (2011). Even if counsel's performance is deficient, prejudice is not ordinarily presumed, except in rare cases. *Redman v. State*, 363 Md. 298, 310-13, 768 A.2d 656 (2001). Thus, even if he can establish that his trial counsel's performance fell outside the "wide range of reasonable professional assistance" described in *Strickland*, Mr. Kulbicki must also show that there is a substantial possibility that the result of his trial would have been different. *Id*.

¹⁴State v. Gross, 134 Md. App. 528, 577, 760 A.2d 725 (2000), aff'd on other grounds, 371 Md. 334, 809 A.2d 627 (2002).

The issue of prejudice must be assessed in relation to the other evidence in the case. "In making this determination, a court hearing an ineffectiveness claim must consider the totality of the evidence before the ... jury. Some of the factual findings will have been unaffected by the errors, and factual findings that were affected will have been affected in different ways.... Taking the unaffected findings as a given, and taking due account of the effect of the errors on the remaining findings, a court making the prejudice inquiry must ask if the defendant has met the burden of showing that the decision reached would reasonably likely have been different absent the errors." *Strickland*, 466 U.S. at 695-96.

A reader of the Majority opinion might be excused for believing that the evidence against Mr. Kulbicki began and ended with CBLA testimony. The Majority opinion makes no effort to consider the testimony, exhibits, and other forensic evidence that tied Mr. Kulbicki to the crime. That evidence is largely recounted in the opinion of the Court of Special Appeals in this case, ¹⁵ and I will not repeat it here other than to summarize the main items:

- Mr. Kulbicki, a married 36-year-old police officer, had engaged in an on-again and off-again extra-marital affair with Gina Marie Neuslein, the 22-year-old victim. That relationship had occurred over the course of at least two years, had resulted in two pregnancies, and, at the time of the murder, had been recently terminated by Ms. Neuslein.
- Ms. Neuslein instituted child support proceedings against Mr. Kulbicki. Although Mr. Kulbicki adamantly denied that he had had sex with her (a denial he repeated to detectives investigating the murder), a paternity

¹⁵ Kulbicki v. State, 207 Md. App. 412, 418-28, 53 A.3d 361 (2012).

test established that he was the father of her 18-month old child and a court hearing was scheduled in the child support proceeding. Ms. Neuslein was murdered the weekend before the scheduled hearing. (At his murder trial, Mr. Kulbicki conceded that he had fathered the child).

- On the day before the murder, Mr. Kulbicki picked up Ms. Neuslein in his truck while she was walking to her job at a Royal Farms Store and dropped her off at the store. According to a fellow employee, Ms. Neuslein arrived upset and appeared to have finger marks on her face. Later that evening, Mr. Kulbicki was observed sitting in his truck outside the store and later in an alley near the Neuslein residence.
- On the day of the murder, Ms. Neuslein was apparently abducted while walking to work and killed shortly thereafter by a close range gunshot to the head. Her body was found in a state park some distance from her residence and workplace.
- Based on the condition of Ms. Neuslein's body and the location where it was found signs that the body had been dragged and the absence of shell casings or bullets in the vicinity homicide investigators concluded that the murder had been committed elsewhere and the body transported to the park.
- During the time frame of the murder, as estimated by the medical examiner, an eyewitness observed Mr. Kulbicki in his truck at the area of the park where Ms. Neuslein's body was found.
- A search of Mr. Kulbicki's home two days after the murder resulted in the seizure of Mr. Kulbicki's denim work jacket, which had a blood stain that matched Ms. Neuslein's DNA and blood type, but not Mr. Kulbicki's. A .38 caliber revolver was also seized from Mr. Kulbicki's home and was determined to be operable.
- The police also seized Mr. Kulbicki's truck two days after the murder. Although the interior of the front of the truck appeared to have been cleaned, investigators found human bone fragments (including a larger fragment identified as a skull fragment), a bullet fragment, and human blood stains.

- Expert serology and DNA analysis linked Ms. Neuslein to the bone fragments and blood stains in Mr. Kulbicki's truck. DNA analysis of the bone fragments found in Mr. Kulbicki's truck excluded Mr. Kulbicki but were sufficiently consistent with Ms. Neuslein's DNA such that she could not be excluded. A number of the blood stains in the truck also bore genetic markers consistent with Ms. Neuslein's blood, but inconsistent with Mr. Kulbicki's.
- Expert testimony by a Smithsonian scientist established that the larger bone fragment in Mr. Kulbicki's truck had been created by a tremendous amount of traumatic force, consistent with a contact gunshot wound, and contained lead and carbon deposits.
- Expert ballistics analysis not CBLA analysis of the bullet fragment from Mr. Kulbicki's truck established that it had markings consistent with being fired from a .38 or larger caliber gun.

None of this evidence depended on the CBLA analysis. The Majority opinion makes no mention of it.

Mr. Kulbicki's post-conviction counsel have, at various times, challenged the admissibility of other items of evidence and other aspects of his trial, but the Majority opinion does not purport to find merit in any of those challenges.

Conclusion

If Mr. Kulbicki's trial counsel were ineffective, it was not with respect to their challenge of the CBLA evidence. Neither prong of *Strickland* is satisfied here. As the Majority appears to concede, no other court that has considered a similar claim of ineffective

assistance of counsel has held that the failure to discover the flaws in CBLA evidence at a trial held during the 1990s amounted to ineffective assistance of counsel.¹⁶

To conclude that Mr. Kulbicki's trial counsel were ineffective in not discrediting CBLA analysis before anyone else raised doubts about CBLA evidence is to distort the *Strickland* standards. One might chalk that up to the cliche that hard cases make bad law.¹⁷ But while, for many reasons, this may be a hard case, the question whether trial counsel were ineffective with respect to the CBLA evidence is not.

All of this is not to say that the use of the CBLA evidence in Mr. Kulbicki's trial is not troubling. Post-conviction counsel briefed and argued before us other grounds on which to vacate Mr. Kulbicki's conviction based on other legal theories related to the use of the CBLA testimony at his trial. See footnote 4 above. Although my inclination would be to

¹⁶ See, e.g., United States v. Davis, 406 F.3d 505, 508-10 (8th Cir. 2005) (not ineffective assistance of counsel at 1995 trial when research used to challenge CBLA evidence in post-conviction proceeding did not begin until three years after trial and some limitations of that evidence ultimately exposed in research were raised by defense at trial); Smith v. Department of Corrections, 572 F.3d 1327, 1350 (11th Cir. 2009) (defense counsel not required to anticipate future developments concerning CBLA evidence at 1990 trial); Libby v. McDaniel, 2011 WL 1301537 at *8-9 (D. Nev. 2011) (same; 1990 trial); Robertson v. State, 2009 WL 277073 (Tenn. Crim. App. 2009) (same; 1998 trial); Wyatt v. State, 71 So. 3d 86, 103 (Fl. 2011) (defense counsel did not provide ineffective assistance of counsel with respect to CBLA evidence at 1991 trial when comprehensive research concerning flaws in CBLA evidence did not exist until well after that trial); Wyatt v. State, 78 So. 2d 512, 527 (Fl. 2011) (same result with respect to same defendant, but different trial); see also United States v. Higgs, 663 F.3d 726, 739 (4th Cir. 2011) (defense trial counsel was not ineffective at 2000 trial in failing to ferret out internal FBI studies of CBLA that pre-dated published studies, particularly when counsel obtained important concessions on cross-examination).

¹⁷ See Northern Securities Co. v. United States, 193 U.S. 197, 363 (1904) (Holmes, J., dissenting).

find that those bases are either without merit or not ripe at this time, ¹⁸ they would have formed a sounder basis for the Majority's decision without distorting the law governing ineffective assistance of counsel.

Judge Harrell and Judge Rodowsky have authorized me to say that they join this opinion.

¹⁸Those courts that have considered due process challenges to the use of CBLA evidence have rejected that argument. *See* Annotation, *Use and Effect of Comparative Bullet Lead Analysis (CBLA) in Criminal Cases*, 92 ALR 6th 549 (2014) at §21 (collecting cases). Mr. Kulbicki has not yet followed the procedures set forth in Maryland Rule 4-332 to seek a writ of actual innocence under CP §8-301 on the ground of newly discovered evidence.