

United States Court of Appeals
FOR THE DISTRICT OF COLUMBIA CIRCUIT

Argued November 7, 2018

Decided April 14, 2020

No. 17-3080

UNITED STATES OF AMERICA,
APPELLEE

v.

DENNIS T. BUTLER,
APPELLANT

Appeal from the United States District Court
for the District of Columbia
(No. 1:70-cr-01717-1)

Jenna M. Cobb argued the cause for appellant. With her on the briefs were *Jonathan W. Anderson* and *Adam G. Thompson*.

Patricia A. Heffernan, Assistant U.S. Attorney, argued the cause for appellee. With her on the brief were *Jessie K. Liu*, U.S. Attorney, and *Elizabeth Trosman*, *John P. Mannarino*, and *Pamela S. Satterfield*, Assistant U.S. Attorneys.

Before: SRINIVASAN, *Chief Judge*, and PILLARD, and KATSAS, *Circuit Judges*.

Opinion for the Court filed by *Chief Judge* SRINIVASAN.

Dissenting opinion filed by *Circuit Judge* KATSAS.

SRINIVASAN, *Chief Judge*: Almost fifty years ago, appellant Dennis Butler was convicted of murder. At his trial, an FBI forensic expert testified that hairs found on the victim were microscopically identical to Butler's hair. The government recently acknowledged, though, that hair evidence of the kind introduced against Butler was false and exceeded the limits of science, and that the prosecution knew or should have known as much at the time of his trial.

Butler brought a motion to set aside his conviction and vacate his sentence based on the government's admission that it had used false evidence against him. We examine a single question: whether the false hair evidence presented by the government was material. The district court found the evidence immaterial. In our view, however, there is a reasonable likelihood that the false hair evidence introduced against Butler could have affected the jury's verdict. We thus reverse the judgment of the district court.

I.

A.

For decades, the FBI Laboratory employed a form of forensic analysis dubbed "hair microscopy." Hair microscopy called for forensic examiners to conduct side-by-side, microscopic comparisons of hair samples in an effort to ascertain whether hairs from a crime scene matched hairs from

a suspect. The government used ostensible matches at trial as scientific evidence linking defendants to crimes.

There was, however, a significant problem with that field of analysis: science had not validated its foundational premises. Existing studies failed to support a trained examiner's ability to identify a "match" based on any objective system of visual hair comparison or to validly estimate the frequency of hair characteristics (and therefore of matches) in the general population.

Although those limitations were long known to the government, prosecutors continued to rely on hair evidence at trial. By 2009, however, multiple developments spurred the government to reassess its position on the evidentiary reliability of hair microscopy. First, the National Academy of Sciences published a groundbreaking report critical of the practice. The report confirmed that "[n]o scientifically accepted statistics exist about the frequency with which particular characteristics of hair are distributed in the population," and noted the absence of any uniform standards for identifying how many characteristics must be shared between two hairs before they can be called a "match." Nat'l Research Council, *Strengthening Forensic Science in the United States: A Path Forward* 160 (2009). Additionally, DNA testing exonerated several men who had been convicted using hair evidence, some of whom had been imprisoned for decades.

Those events prompted the federal government to undertake its largest postconviction review in history. Working in tandem with defendants' rights groups, the government audited thousands of convictions from the pre-2000 period to identify cases in which the government made use of false hair evidence. This is one of the identified cases.

B.

On September 30, 1970, appellant Butler was arrested for the murder of Jesse Mears. The previous day, police had discovered Mears's body in an apartment building Mears managed in Northeast Washington D.C. The victim was found in a vacant apartment's bathroom with toilet paper and a stocking stuffed in his mouth, both "soggy" wet with a clear liquid. Trial Tr. 36, July 8, 1971, S.A. 8. His hands were bound, a telephone cord was wrapped around his neck, and his keys were missing. The police found a soda bottle near his body filled with water, a paint pan in the kitchen sink, and a belt split into two pieces in the kitchen. The cause of death was determined to be "asphyxiation secondary to garroting." Trial Tr. 38, July 8, 1971, S.A. 10.

The prosecution's lead witnesses were James Hill and Phyllis Gail Robinson. On direct examination, Hill testified that he had known Butler for several years, and had called Butler at around 3:00 or 3:30PM on the day of the murder. When Butler came to the phone "he sounded like he was out of breath." Trial Tr. 66, July 8, 1971, A.A. 181. Hill said that he asked where Butler had been, and Butler, according to Hill, volunteered that "he had just killed the rent man"—i.e., Jesse Mears. *Id.* at 67, A.A. 182. Butler said that the "rent man" had "caught [Butler] selling narcotics to two boys," and that, in an ensuing struggle, Butler attempted to strangle Mears with a belt but used a telephone cord after the belt broke. *Id.* Hill testified that Butler then said he had poured water down the victim's throat "to make sure that he was dead." *Id.*

Hill further testified that Butler came to Hill's house later that day, around 4:00PM. Robinson, who was then dating Hill, joined them at the house sometime later. According to Hill's testimony, Hill asked Butler whether Hill could share the story

with Robinson. Butler agreed, and Hill told Robinson that Butler had just killed a man. Butler then recounted some of the details of the crime to Robinson.

Hill related that, the following day, police officers came to his house, asked if he knew anything about a pair of keys, and searched under his mattress. Later, at the police station, Hill gave a statement to police officers describing the previous day's events. Hill testified that Robinson was also at the station but was separated from Hill. He said that he did not overhear the officers say anything to Robinson and that he had not been threatened by the officers.

Robinson's testimony about the day of the murder tracked Hill's in material respects. She admitted that, initially, she had told the police that her knowledge of the murder came from Hill rather than Butler. But after a police officer informed her that her statement was inconsistent with Hill's in that regard, she revised the story and said that Butler had told her. Robinson testified that her original statement had been a lie fueled by fear because, in her words, she "had never been in no trouble." Trial Tr. 263, July 9, 1971, S.A. 176.

To rebut the government's evidence, the defense attacked the couple's credibility. Both witnesses prevaricated about their drug use in their trial testimony. Hill originally denied having a specific reason for calling Butler the day of the murder and claimed that the two of them had discussed nothing other than the murder. But later, Hill admitted he had called Butler to obtain narcotics and had used heroin with Butler before Robinson arrived.

Hill was also unable to deliver a consistent narrative about his drug use after the murder. At one point, he testified that he had stopped using heroin seven or eight months before the trial. But at another point, he claimed he had stopped using narcotics

about one year before the trial. When the defense noted that a one-year period would have been *before* the September murder—and thus before a day on which Hill had already admitted to using heroin—he nonetheless insisted that it had been “about a year,” before ultimately conceding it could have been “less than a year.” Trial Tr. 112–113, July 8, 1971, A.A. 227–228.

Additionally, Hill testified that Robinson had snorted heroin the day of the murder while the three were together at the house. But he also stated that Robinson only used heroin on weekends. When the defense noted that the day of the murder was a Tuesday, he revised his earlier testimony and said that he did not remember whether she had snorted heroin that day. Hill also admitted that he may have given inconsistent statements to defense lawyers about what he had overheard at the police station and whether officers had threatened him with criminal liability.

For her part, Robinson, like Hill, gave contradictory testimony about her drug use. At first, she testified that she only took heroin on weekends. But she was forced to renege and acknowledge she had taken heroin on the Tuesday of the murder. And like Hill, Robinson had given inconsistent statements on a question in dispute at trial: who (Hill or Butler) had told her about the murder.

The government responded by introducing an array of corroborating evidence. Several witnesses testified to having seen Butler on the day of the crime near the apartment building. A witness testified to seeing Butler and the victim working side-by-side on a car together around 1:00PM in front of the building. An acquaintance of Butler’s testified that he had seen Butler walking toward the area of the building between 2:00 and 3:00PM. And several witnesses testified that they found

the victim's stolen key ring after it was thrown from the roof of a building near Butler's girlfriend's house.

Of the sixteen fingerprint impressions recovered from the crime scene, none belonged to Butler. But the government presented two other kinds of forensic evidence at trial. First, a government expert testified that paint found on the victim's clothing, on the soda bottle at the crime scene, and on the defendant's pants, all could have come from the same source based on their type, texture, and color, and were likely wet when applied.

Second, and of particular relevance, the forensic expert testified in detail about hair samples found on the victim's clothing, including his jacket, shirt, and pants. The expert described a "direct microscopic comparison test" he had conducted, comparing the hairs from the victim's clothing to sample hairs from Butler. Trial Tr. 527, July 13, 1971, S.A. 349. The expert explained he had considered sixteen features of the hair, describing some of the features as "very important" or "very distinct" identifying characteristics. *Id.* at 529, S.A. 351. The two sets of hairs, according to the expert, "match[ed] in all microscopic characteristics," and were thus "microscopically the same or alike." *Id.* at 528–30, S.A. 350–52. Later, the prosecutor asked whether the expert was saying that the hairs from the victim's clothing were "only similar" to Butler's. *Id.* at 535, S.A. 357. The expert responded, "No, I am not. When you imply that something is similar, you are implying that it is also different in some respects. My report and my testimony is that these hairs are the same. They are alike in all identifiable microscopic characteristics." *Id.*

The expert gave somewhat varying testimony about the significance of that finding. At one point, he noted that "hairs do not contain enough identifying characteristics to be

positively identified as originating from a certain head of a certain individual to the exclusion of all other individuals in this race group.” *Id.* at 530, S.A. 352. But he then stated that the hairs he had examined “are the same or alike in all the microscopic characteristics that were available to [him].” *Id.* And when asked, “how likely or unlikely is it for two hairs to be microscopically alike, yet come from different people?,” instead of answering that he did not know (the scientifically sound answer), the expert said that, in the approximately 10,000 examinations he had conducted, “there have been four or five times when the hair of the suspect and the hair of the victim was so nearly alike . . . that I was unable to come to a conclusion as to where these hairs originated. It would be very seldom.” *Id.* at 531, S.A. 353.

On redirect, the expert reiterated that testimony. He was asked, “[i]s it your testimony that in 10,000 examinations only four or five times the victims and the defendants have been . . . so alike you were unable to distinguish?” *Id.* at 535, S.A. 357. He answered in the affirmative: “Approximately 10,000.” *Id.* But on re-cross, when defense counsel asked, “we don’t know how many other people have the same microscopic characteristics of their hair follicles as the one that you identified as Mr. Butler’s hair from the clothing of Mr. Mears?,” he answered, “Yes, that is correct. I have no idea whether anyone would have the same microscopic characteristics.” *Id.* at 536, S.A. 358.

In summation, the prosecutor said the following to the jury about the significance of the expert’s hair testimony:

He said when he compared the hairs that were found on the victim’s clothing with the defendant’s hairs that were taken by [the detective] from him at the infirmary, when he

compared those two, what were they? They were the same in every microscopic detail, the same.

I said, how often . . . does it happen? You can't be positive, yes, but how often does it happen that two people's hair, two different people, are so similar and so alike that you would be unable to tell? Out of 10,000 examinations, he said he recalls it happening approximately four times.

Id. at 731–32, S.A. 495–96.

Later, in his rebuttal summation, the prosecutor reminded the jury:

You have the FBI report saying that this man's hair compared with the hairs found on the body of the dead man. They are the same in every microscopic characteristic—every one. You heard the sixteen possible combinations, lack thereof, etc. Every one matched.

Id. at 783, S.A. 535.

On July 15, 1971, the jury convicted Butler of felony murder, first degree murder, and robbery. Butler appealed his conviction to this court, arguing, among other things, that the trial judge had erred in declining to order physical and psychiatric examinations of Hill and Robinson. *See United States v. Butler*, 481 F.2d 531, 532 (D.C. Cir. 1973). We rejected Butler's arguments and affirmed his conviction. *See id.* at 537.

C.

In 2015, more than four decades after Butler’s convictions, the government reviewed his case as part of the overall examination of cases involving the use of discredited hair microscopy analysis. The government “determined that the microscopic hair comparison analysis testimony or laboratory report presented in this case included statements that exceeded the limits of science . . . and were, therefore, invalid.” Letter from Norman Wong, Special Counsel for the Department of Justice to Vincent H. Cohen Jr., Acting United States Attorney for the District of Columbia 2 (Sept. 11, 2015) (Wong Letter), A.A. 68.

The government identified two types of errors in the expert’s testimony against Butler. First, “[t]he examiner stated or implied that the evidentiary hair could be associated with a specific individual to the exclusion of all others.” *Id.* at 71. Second, “[t]he examiner assigned to the positive association a statistical weight or probability or provided a likelihood that the questioned hair originated from a particular source, or an opinion as to the likelihood or rareness of the positive association that could lead the jury to believe that valid statistical weight can be assigned to a microscopic hair association.” *Id.* Both statements were flawed in that they “exceed[ed] the limits of science.” *Id.*

The government advised that, if Butler were to seek post-conviction relief “based on the Department[] [of Justice’s] disclosure that microscopic hair comparison laboratory reports or testimony used in this case contained statements that exceeded the limits of science,” the government then would waive any reliance on the statute of limitations or any procedural-default defense “in order to permit the resolution of legal claims arising from the erroneous presentation of

microscopic hair examination laboratory reports or testimony.” *Id.* at 68. The government, though, took “no position regarding the materiality of the error in this case.” *Id.*

In September 2016, Butler moved to vacate his sentence pursuant to 28 U.S.C. § 2255, arguing that the false hair testimony violated his rights under the Due Process Clause. The district court denied the motion, holding that the hair evidence was not material and that its use at trial thus did not violate the Constitution. *United States v. Butler*, 278 F. Supp. 3d 461 (D.D.C. 2017). Butler now appeals.

II.

The scope of our review is confined. The government concedes that the hair microscopy evidence presented against Butler was false and exceeded the limits of science. The government also acknowledges that the prosecution knew or should have known of hair microscopy evidence’s inadequacies at the time of trial. And the government waives statute-of-limitations and procedural-default defenses. In light of the government’s concessions and waivers, the sole question for us is whether the prosecution’s use of the false hair testimony against Butler was material. If so, his constitutional rights were infringed.

In a line of cases beginning with *Napue v. Illinois*, 360 U.S. 264 (1959), the Supreme Court has consistently recognized that the government’s knowing presentation of false evidence against a criminal defendant is “incompatible with ‘rudimentary demands of justice.’” *Giglio v. United States*, 405 U.S. 150, 153 (1972) (quoting *Mooney v. Holohan*, 294 U.S. 103, 112 (1935)). Yet not every knowing use of false evidence by the government against a defendant necessarily rises to the level of constitutional error. Rather, the introduction of false evidence unconstitutionally denies a

defendant a fair trial if the evidence counts as material. *E.g.*, *United States v. Agurs*, 427 U.S. 97, 104–108 (1976).

As we recently explained, “the government’s introduction of false testimony is material if the evidence ‘could in any reasonable likelihood have affected the judgment of the jury.’” *United States v. Ausby*, 916 F.3d 1089, 1092 (D.C. Cir. 2019) (per curiam) (quoting *Giglio*, 405 U.S. at 154) (ellipses omitted); see *Napue*, 360 U.S. at 271. That “‘reasonable likelihood’ standard does not require the defendant to show ‘that he more likely than not would have been acquitted’ absent the false statements. Rather, the defendant need show only that the false testimony ‘undermines confidence’ in the verdict. Thus, even if the false testimony ‘may not have affected the jury’s verdict,’ it is material if the evidence reasonably *could* have affected the verdict.” *Ausby*, 916 F.3d. at 1093 (quoting *Wearry v. Cain*, 136 S. Ct. 1002, 1006 & n.6 (2016) (per curiam)) (formatting modified).

So understood, the “reasonable likelihood” test “is quite easily satisfied.” *Id.* at 1093 (quoting *United States v. Williams*, 233 F.3d 592, 594 (D.C. Cir. 2000)). The standard is “strict” against the government, “not just because [the cases] involve prosecutorial misconduct, but more importantly because they involve a corruption of the truth-seeking function of the trial process.” *Agurs*, 427 U.S. at 104. Indeed, we have described the reasonable-likelihood standard as establishing “a veritable hair trigger for setting aside the conviction,” *United States v. Gale*, 314 F.3d 1, 4 (D.C. Cir. 2003), and as “mandat[ing] a virtual automatic reversal of a criminal conviction,” *Williams*, 233 F.3d at 594 (quoting *United States v. Stofsky*, 527 F.2d 237, 243 (2d Cir. 1975)).

In *Ausby*, we recently applied the reasonable-likelihood test in closely parallel circumstances. There, as here, the

government had introduced false hair microscopy evidence against the defendant at trial. And there, as here, the sole issue we confronted was whether the evidence was material. The district court, as in this case, had concluded that the evidence was immaterial, but we reversed. Explaining that the “false hair-comparison testimony” presented against Ausby “was neither the sole piece of evidence on which the prosecution hung its case nor redundant or irrelevant,” we determined that the “testimony falls on the material side of the spectrum.” *Ausby*, 916 F.3d at 1094–95. We reach the same conclusion here, applying the same “quite easily satisfied” materiality standard. *Id.* at 1093.

The cornerstone of the government’s case against Butler was the testimony of Hill and (to a lesser degree) Robinson. Hill, though, repeatedly offered false testimony about his drug use, falsities that were revealed or corrected upon further examination. And the defense introduced credible impeachment evidence demonstrating Hill’s prior inconsistent statement about the circumstances of his police statement. Robinson was also an admitted drug user and similarly testified falsely about her heroin use on the day of the murder. And she admitted to making a prior inconsistent statement on the source of her knowledge of the crime. In the absence of corroborating evidence, then, a reasonable juror could have doubted their credibility and thus discounted their testimony.

We in fact said as much forty-seven years ago when we initially reviewed Butler’s conviction. In addressing (and ultimately rejecting) a claim that the trial court should have ordered examinations of Hill and Robinson for purposes of assisting the jury in weighing their credibility, we said that their testimony “present[ed] a particular danger of unreliability.” *Butler*, 481 F.2d at 534. We explained that their testimony about their drug use “should have sufficed to put the jury on

notice that, to the extent the witnesses' testimony was uncorroborated, it should be weighed with caution." *Id.* at 535. And "[t]he danger of unreliability," we observed, "is substantially increased by a factor present in this case . . . : 'The addict-turned-informer (or prosecution witness) may have a special and very powerful motive to fabricate a case for his own benefit,'" i.e., the threat of criminal prosecution. *Id.* at 534 (quoting *United States v. Kinnard*, 465 F.2d 566, 574 (D.C. Cir. 1972)) (formatting modified). Defense counsel accordingly "urged the jury to conclude that Hill and Robinson 'lied . . . on the stand.'" *Butler*, 278 F. Supp. 3d at 473 (quoting trial transcript).

Notwithstanding our significant concerns about Hill's and Robinson's reliability, we held that the trial court's failure to order their examinations fell short of an abuse of discretion, chiefly because "of the substantial corroborative evidence introduced by the government." *Butler*, 481 F.2d at 535. The prosecutor's closing argument to the jury echoed our estimation of the corroborating evidence's centrality. He stressed to the jury that "[w]e don't ask you to only believe James Hill. We only ask you to do what is reasonable, to test his story and to test Gail Robinson's story Test those with the other evidence and what have you? You start to realize that those stories are true. It rings true. Each little bit of evidence starts to add up." Trial Tr. 779, July 14, 1971, S.A. 531.

Addressing what he evidently sensed to be a core vulnerability in the government's case—Hill's drug use and the concomitant "danger of [his] unreliability" as a witness, 481 F.2d at 534—the prosecutor said to the jury: "the fact that James Hill was a narcotic addict at the time . . . does that mean that in and of itself he didn't hear what the defendant told him? Everything that he has said has been corroborated by circumstantial evidence and scientific evidence. Ladies and

gentlemen, test the testimony once again What does it show? Corroboration, corroboration, corroboration.” Trial Tr. 781, July 14, 1971, S.A. 533.

Among the corroborating evidence that the prosecution and our court deemed critical, the false hair testimony was especially weighty. Apart from Hill’s and Robinson’s testimony, the government’s principal corroborating evidence pointing to Butler’s culpability consisted of: (i) forensic evidence indicating that paint chips found on Butler, the victim, and at the crime scene could have come from the same source; (ii) testimony from eyewitnesses who saw Butler in the vicinity of the crime scene near the estimated time of the crime; (iii) the discovery of the victim’s keys in an area Butler frequented; and (iv) the false testimony that Butler’s hair microscopically matched hair found on the victim. *See Butler*, 481 F.2d at 533.

With regard to the first of those categories of corroborating evidence, an expert’s forensic paint analysis suggested that paint chips found on Butler, on the victim, and on objects found at the crime scene could have all originated from the same source. Yet the government’s own witnesses also testified that the paint was likely wet when applied to the clothing and that Butler had been in the apartment days before at the time the apartment was painted. Jurors therefore could have concluded that the spot of paint had been applied to Butler’s clothing days before the murder—indeed, that may have been the most plausible explanation based on the government’s evidence.

The government also offered evidence suggesting that Butler had been seen going to and from the area of the murder at times roughly corresponding with the estimated time of the crime. The evidence at trial, however, suggested that Butler frequented the neighborhood. For example, the government’s witnesses testified that he had been inside the apartment where

the murder took place days earlier and had also helped the victim fix a car just outside the apartment on the day of the crime. In light of Butler's regular, licit visits to the area, a reasonable juror could have construed his presence there in the rough timeframe of the offense, standing alone, to offer modest corroboration for Hill's and Robinson's testimony.

As for the victim's keys, a set of keys carried by the victim was found on the rooftop of a house located on a block where Butler's girlfriend lived and Butler often stayed. But no one testified to having seen Butler with the keys, there was testimony that some of the keys were already missing by the time of the murder, the keys were found on the rooftop almost two weeks after Butler had been arrested for the murder, and the rooftop, while on the same block as Butler's girlfriend's residence, was also within two blocks of the murder scene. As a result, while the keys could have been deposited on the rooftop by Butler, they also could have been put there by someone else who committed the crime. After all, it was not a secret that the police had been searching for the keys: Hill at least knew of the police's interest in finding the keys based on his testimony that the officers had searched his residence for them.

By comparison, the hair microscopy evidence offered powerful corroboration for Hill's and Robinson's testimony pointing to Butler as the perpetrator. The defense's sole explanation for the presence of hair matching Butler's on the victim's clothing, apart from noting questions about the probability of a hair match in the first place, was to suggest that Butler's hair had been transferred to the victim when the two of them worked on a car together earlier in the day of the murder. But the government had a compelling response: "Does common sense tell you that when two men are just standing next to one another the hair will get on the coat, the

shirt and on the pants?” the prosecutor asked in summation. “Common sense will tell you,” he continued, “that hair from a person gets on another person’s clothing if the person were standing over him or sitting on him strangling him. What is more reasonable?” Trial Tr. 777–78, July 14, 1971, S.A. 529–30.

The government now seeks to cast doubt on the force of the hair microscopy evidence presented at trial. The government notes the expert’s testimony at one point that “hair analysis does not permit a positive identification of a hair as ‘originating from a certain head.’” Gov’t Br. 50–51 (quoting Trial Tr. 530–32, July 13, 1971, S.A. 352–354). But the government itself, after reviewing the trial transcript, determined that the “examiner stated or implied that the evidentiary hair could be associated with *a specific individual to the exclusion of all others*,” a “type of testimony” that is false and “exceeds the limits of the science.” Wong Letter 5, A.A. 71 (emphasis added). The government cannot in one breath concede the hair testimony’s falsity and in the next breath urge that the hair testimony was accurate after all.

At any rate, in *Ausby*, the expert’s testimony similarly included a statement that “microscopic hair comparisons do not constitute a basis of positive personal identification”; and he thus allowed that the hairs not only could have “originated from the head of Mr. Ausby” but also could have come “from some other person whose head hairs or pubic hairs are microscopically identical.” 916 F.3d at 1091 (formatting modified). We then acknowledged that the expert “had conceded that microscopic hair comparison analysis cannot produce a positive identification.” *Id.* But we still determined that the admittedly false hair testimony presented against Ausby, taken as a whole, was material. So too here.

Even if the expert's testimony against Butler did at times include an acknowledgement that hair microscopy could not produce a positive identification, at other points, the expert or prosecutor indicated that it could. That is presumably why the government has now determined that the expert falsely "stated or implied that the evidentiary hair could be associated with a specific individual to the exclusion of all others." Wong Letter 5, A.A. 71; *see also id.* at 7, A.A. 73. The expert recounted the sixteen characteristics of the hair he had analyzed. Describing two of those characteristics in more detail, the expert referred to them as a "very important *identifying* feature" and an "important *identifying* characteristic." Trial Tr. 529–30, July 13, 1971, S.A. 351–52 (emphasis added). And when the prosecutor asked whether the expert was "saying that the hairs that were found of the defendant's on the clothes of the victim are only similar," the expert doubled down: "No, I am not. When you imply that something is similar, you are implying that it is also different in some respects. My report and my testimony is that these hairs are the same." *Id.* at 535, S.A. 357.

Notably, the framing of the prosecutor's question itself assumed that the hairs found "on the clothes of the victims" were "the defendant's" hairs, and the expert's answer reinforced to the jury that the "hairs are the same." Indeed, even defense counsel bought into that assumption about the expert's testimony when he asked the expert a question concerning the "hair from the clothing of" the victim that the expert had "identified as Mr. Butler's." *Id.* at 536, S.A. 358.

The government points to a response that the expert elsewhere gave when asked, "how likely or unlikely is it for two hairs to be microscopically alike, yet come from different people?" *Id.* at 531, S.A. 353. The expert answered, "[i]t would be very seldom"; but as a preface to that conclusion, he somewhat confusingly referenced the number of times he had

been unable to differentiate a *victim's* hair from the defendant's (four or five times out of roughly 10,000 examinations). *Id.* Even if the expert's reference to a victim's hair might have seemed off-base, a confused juror might well have focused on his ultimate response of "very seldom." *Id.* That may be why the government pointed to this exact exchange as one in which the expert had invalidly "assigned to the positive association"—i.e., the association of the hair "with a specific individual"—"a statistical weight or probability or provided a likelihood that the questioned hair originated from a particular source, or an opinion as to the likelihood or rareness of the positive association that could lead the jury to believe that valid statistical weight can be assigned to a microscopic hair association." Wong Letter 5, A.A. 71.

In his closing argument to the jury, moreover, the prosecutor used the figures referenced by the expert, but in a manner indicating that they directly responded to the question that had been posed to the expert:

Agent Scholberg of the FBI . . . when he compared the hairs that were found on the victim's clothing with the defendant's hairs . . . [t]hey were the same in every microscopic detail, the same. I said, How often, Agent Scholberg, does it happen? You can't be positive, yes, but *how often does it happen that two people's hair, two different people, are so similar and so alike that you would be unable to tell? Out of 10,000 examinations, he said he recalls it happening approximately four times.*

Trial Tr. 731–32, July 14, 1971, S.A. 495–96 (emphasis added). A juror hearing that argument by the prosecutor could have readily inferred that, according to the expert, it would be exceedingly unlikely for two hairs deemed to be

microscopically identical to have come from different people. That is precisely the kind of conclusion that science did not (and does not) support. In *Ausby*, we relied on the prosecutor's closing argument as supporting our conclusion that the presentation of false hair evidence in that case was material. 916 F.3d at 1095. We do likewise here.

The government finally contends that Hill's and Robinson's accurate recounting of various details found at the crime scene—such as the presence of a torn belt, a sock in the victim's mouth, and a bottle with water—lends corroboration to their accounts that Butler had committed the crime and told them about it. That may be so, but the defense also presented evidence suggesting: (i) the police initially suspected that it was Hill himself who possessed the victim's keys (and Hill knew as much); (ii) Hill had spoken with individuals who relayed what someone who visited the crime scene had seen; (iii) Hill was not credible on the issue of whether he had been threatened with criminal liability; and (iv) Robinson was not credible on the source of her knowledge of the crime. The defense argued to the jury that other witnesses who had seen (or been told about) the crime scene could have related details about the scene to Hill and Robinson before they spoke with the police. *See Butler*, 278 F. Supp. 3d at 467–68, 471, 473. The defense also suggested to the jury that the police themselves may have told Hill and Robinson about those details. *Id.* at 483 n.12.

Even if the last suggestion lacked “concrete support,” *id.*, a reasonable juror could have surmised that Hill and Robinson had a motive to misstate the source of their information. And the government, not Butler, bore the burden to demonstrate beyond a reasonable doubt who had informed Hill and Robinson about the details of the crime scene. In the absence of the potentially confirming role played by the false hair

evidence, a reasonable juror could have found that the government fell short of meeting its heavy burden on that score, even without the defense advancing a compelling alternative theory.

Our dissenting colleague, though, would conclude that the false hair microscopy evidence introduced against Butler could not have affected the jury, even under the “quite easily satisfied” standard of materiality that governs when the prosecution presents false testimony. *Ausby*, 916 F.3d at 1093 (quoting *Williams*, 233 F.3d at 594). As our colleague sees it, our conclusion in applying that standard here is out of step with other decisions. To the contrary, our conclusion is fully in step with precedent, as best illustrated by our most germane and recent decision, *Ausby*. There, we reached the same result, under the same standard, in the same circumstances (also a murder trial in which the prosecution had introduced false hair microscopy testimony). Our colleague emphasizes what he views to be (i) the relatively insignificant role played by the false hair evidence in this case, and (ii) the strength of the other evidence implicating Butler. In both of those respects, however, this case is of a piece with *Ausby*.

First, in arguing that the false hair testimony played only a minor role in Butler’s trial, our colleague submits that: the testimony designated as false comprised only “twelve lines of text during a four-day prosecution”; a number of other lines of testimony were deemed to qualify as curative, “limiting language,” including testimony specifically stating that the hair evidence was “not a positive identification”; the prosecutor made only limited reference to the hair evidence in his closing arguments; and defense counsel explained the limitations of hair-microscopy evidence in his own closing argument. Dissenting Op. 11, 16–21.

All of that, however, was also true in *Ausby*, yet we (unanimously) found the false hair evidence to be material and thus vacated Ausby’s conviction. In particular, in *Ausby*: the testimony designated as false comprised virtually the same number of lines of transcript text (fifteen) in a four-day trial, *Ausby* App. 74; a number of other lines of testimony were deemed to qualify as curative, “limiting language,” *id.*, including testimony specifically stating that hair microscopy evidence does “not constitute a basis of positive personal identification,” *Ausby*, 916 F.3d at 1091; the “prosecution only briefly discussed the hair evidence in its opening and closing arguments,” *United States v. Ausby*, 275 F. Supp. 3d 7, 30 (D.D.C. 2017); and defense counsel explained and emphasized the limitations of that evidence in his closing argument, *id.* at 21; *see Ausby*, 916 F.3d at 1091. In that light, the allegedly limited role played by the false hair testimony in this case affords no ground for reaching a different result than in *Ausby*.

Nor does the strength of the other evidence of guilt. Our dissenting colleague observes in that regard that: the prosecution in Butler’s trial presented the testimony of twenty-three witnesses over four days; the jury returned its verdict of guilt in one day; the district court, in finding the false hair evidence immaterial, “painstakingly reviewed” the evidence and arguments presented the jury for some twelve pages of its published opinion; and that court viewed the non-hair evidence of guilt to be “overwhelming.” Dissenting Op. 1–3, 5–6.

Again, though, all of that could equally be said about *Ausby*. There, too, the prosecution presented the testimony of twenty-three witnesses over four days, *Ausby*, 275 F. Supp. 3d at 10; the jury returned its verdict in just an hour and a half, *id.* at 22; the district court reviewed the evidence and arguments presented to the jury for some thirteen pages of its published opinion, *id.* at 9–23; and that court (coincidentally, the same

judge who wrote the equally thorough and considered decision we review here) viewed the non-hair evidence to be “overwhelming,” *id.* at 32. Our court still found a reasonable likelihood that the false hair evidence could have affected the jury’s judgment. And we follow that same course here.

In arguing that the hair evidence could not have affected the jury’s verdict, our colleague emphasizes the testimony of Hill and Robinson. As explained, though, a reasonable juror could have doubted their veracity, such that the hair evidence could have played a confirming role. *See* pp. 13–14, 20–21, *supra*. At any rate, in *Ausby*, too, the centerpiece of the prosecution’s case was non-hair evidence connecting Ausby to the crime. *See Ausby*, 275 F. Supp. 3d at 20, 31–32.

Of particular note, Ausby was known to carry highly distinctive bottles of perfumed oils, and one such bottle was found on the floor of the victim’s bedroom next to her body and three bottles were found on the ground immediately outside, just below an open bedroom window. *Id.* at 11–13. The defense thus did not dispute that Ausby, although a stranger to the victim, had been inside her apartment, or that he had exited it through the window. Nor did Ausby dispute the prosecutor’s account that the perpetrator had escaped through the window after the victim’s boyfriend knocked on her door. *Id.* at 11. Nor, finally, did Ausby dispute that the victim had been away from her apartment for two weeks and returned only on the day of her murder. *Id.* Ausby’s defense was that, even if he had been in the bedroom and had exited it through the window, and even if the perpetrator had also fled through the window, Ausby and the perpetrator still could be different people, with Ausby having been in the apartment in a several-day period before the day of the crime (and having also exited through the window even though the victim would not have

been home then, leaving his perfume vials behind). *See id.* at 21.

The prosecutor, after reviewing the evidence about the perfume vials in his closing argument, said to the jury that he could rest his case “right there” and could be “boring” the jury “with anything further.” *Id.* at 20 (quoting trial transcript). But even if that evidence may have strongly connected Ausby to the crime in the eyes of the jury, *see id.* at 31, the hair evidence purportedly putting Ausby’s hair on the victim’s body, *see id.* at 15, could have removed any conceivable question about whether he was at the scene on the relevant day, rather than a previous day. For that reason, we found a reasonable likelihood that the false hair testimony could have affected the jury’s judgment. *See Ausby*, 916 F.3d at 1095.

Guided by our decision there, we reach the same conclusion here. In *Ausby*, the prosecution chiefly relied on physical evidence connecting Ausby to the murder; and here, the prosecution chiefly relied on Hill’s and Robinson’s testimony connecting Butler to the murder. In both cases, the jury might well have convicted the defendants based on that evidence, regardless of the false hair microscopy testimony introduced against them. But Butler need not show that the jury could not (or would not) have convicted him without the false hair evidence. Recall that a defendant against whom the prosecution introduces false testimony need not show that the jury more likely than not would have acquitted him without that evidence. *See id.* at 1092–93. Rather, “even if the false testimony *may* not have affected the jury’s verdict, it is material if the evidence reasonably *could* have affected the verdict.” *Id.* at 1093 (internal quotation marks omitted). Hence our consistent description of the standard as “quite easily satisfied.” *Id.* (quoting *Williams*, 233 F.3d at 594).

We found it satisfied in *Ausby*, and we do likewise here. And we thus conclude that the government's presentation against Butler of evidence that it knew (or should have known) was false denied him a fair trial.

* * * * *

For the foregoing reasons, we reverse the judgment of the district court and remand with instructions to grant Butler's motion to vacate his sentence pursuant to 28 U.S.C. § 2255.

So ordered.

KATSAS, *Circuit Judge*, dissenting: My colleagues set aside a half-century-old murder conviction based on a few scraps of misleading testimony that were briefly given and immediately corrected. In so doing, they recast *Napue v. Illinois*, 360 U.S. 264 (1959), which permits relief only if there is a reasonable likelihood that false testimony caused a conviction, into a hairline trigger for setting aside convictions. And they downplay untainted evidence that overwhelmingly establishes the defendant's guilt. For both reasons, I respectfully dissent.

I

A

On September 29, 1970, Jesse Mears was strangled to death at age 75. Mears's body was found in the bathroom of a vacant third-floor apartment in a building that he managed. His hands were tied behind his back, and a telephone cord was wrapped tightly around his neck. He had been gagged with a stocking and a wad of toilet paper shoved into his mouth. Dennis Butler, then 19 years old, was arrested the next day and charged with first-degree murder, felony murder, and robbery.

Every court to review the evidence against Butler has described it as "overwhelming." *United States v. Butler*, 481 F.2d 531, 535 (D.C. Cir. 1973); *United States v. Butler*, 278 F. Supp. 3d 461, 483 (D.D.C. 2017). Eyewitnesses placed Butler with Mears around the time of the murder. Matching paint stains were found on their respective clothing. Mears's keys were recovered near Butler's home. And, most damningly, Butler confessed to the murder to two friends, James Hill and Phyllis Robinson, whose testimony recounting the confessions was "comprehensive and believable and, more importantly, supported by overwhelming extrinsic corroboration." *Butler*, 278 F. Supp. 3d at 474 (cleaned up).

According to Hill and Robinson, Mears intruded on Butler selling drugs to two boys in the bathroom of a vacant apartment. Butler confessed to Hill that he “tied the old man up,” gagged him with a stocking, strangled him with a belt (until the belt broke) and then with a telephone cord, “poured some water down his throat to make sure that he was dead,” and absconded with his keys. Supplemental Appendix (S.A.) 22–23. Butler confessed to Robinson that “he was choking the man with a belt and the belt broke and then he started choking him with the telephone cord.” *Id.* at 150–51. The crime scene closely corroborated these accounts. The gag inside Mears’s mouth was “soggy”—wetter than saliva could explain. *Id.* at 8. Mears’s corpse lacked a belt, keys, or wallet. And in the kitchen, police discovered a half-open cabinet drawer that contained a man’s leather belt split into two pieces and left on top of various other items.

Over the course of four days, the prosecution presented live testimony from twenty-one witnesses and stipulated testimony from two more. Hill and Robinson testified at length about Butler’s confessions to each of them. Three witnesses placed Butler near the apartment around the time of the murder. Five witnesses—a medical examiner, a detective, two police officers, and one neighbor—described the crime scene. Five witnesses testified about the recovery of Mears’s keys, and one testified about leaving wet paint in the vacant apartment three days before the murder. Five expert witnesses testified about the keys, the crime scene, the water poured down Mears’s throat, the paint found on the clothes of Mears and Butler, the torn belt, and hair taken from Mears’s clothing and from Butler.

FBI Special Agent Myron Scholberg briefly testified for the prosecution, for less than 16 pages of an 800-page trial transcript. Scholberg began by explaining that the belt had been torn rather than cut. Scholberg then explained his

microscopic examination of the hair found on Mears's clothing and of hair samples taken from Butler. Scholberg opined that the hair on Mears's clothing "could have come from" Butler, though he affirmatively disclaimed any "positive identification." Appellant's Appendix (A.A.) 84. Scholberg further opined that it was virtually impossible for "the hair of the suspect and the hair of the victim" to be indistinguishable. *Id.* at 85. On cross-examination, Scholberg acknowledged that he had "no statistics" about how many people had hair indistinguishable from the hair on Mears's clothing. *Id.* at 86. On re-cross, in response to a further question from defense counsel about "how many other people have the same microscopic characteristics of their hair follicles as the one that you identified as Mr. Butler's hair from the clothing of Mr. Mears," Scholberg reiterated: "I have no idea whether anyone would have the same microscopic characteristics." *Id.* at 90.

The defense presented five witnesses to undercut the credibility of Hill and Robinson and to show that neighbors discussed Mears's killing in the hours after the murder. The jury returned a guilty verdict in one day, and the district court sentenced Butler to twenty years to life in prison.

On direct appeal, this Court affirmed the conviction and sentence. We rejected Butler's contention that the district court had abused its discretion in failing to order Hill and Robinson to be tested for drug use. Both were "admitted heroin users," and we recognized that this undercut the credibility of their testimony. 481 F.2d at 534. But, we continued, "[t]he challenged witnesses' testimony, while ambiguous at times, did present a comprehensive and believable narrative. More importantly, that narrative was supported by overwhelming extrinsic corroboration, giving substantial independent assurance of its reliability." *Id.* at 535.

In 1978, Butler escaped from prison and remained a fugitive until 2006, when he was caught, convicted of escape, and returned to prison.

B

In recent years, concerns arose about the use of hair evidence in criminal trials, which was common before the development of DNA testing. In response, the Department of Justice and the Federal Bureau of Investigation, working with the Innocence Project and the National Association of Criminal Defense Lawyers, began studying the appropriate uses of such evidence. In 2012, DOJ issued a statement titled “Microscopic Hair Comparison Analysis.” A.A. 101. In it, DOJ and the private organizations agreed that some uses of hair evidence are entirely appropriate. Specifically, “[t]he scientific analysis of hair evidence permits a well-trained examiner to offer an opinion that a known individual can either be included or excluded as a possible source of a questioned hair collected at a crime scene.” *Id.* But because “the size of the pool of people who could be included as a possible source of a specific hair is unknown,” a statement “that applies probabilities to a particular inclusion of someone as a source of a hair of unknown origin cannot be scientifically supported.” *Id.* The statement identifies three instances in which testimony “exceeds the limits of science”: if the examiner states that “evidentiary hair could be associated with a specific individual to the exclusion of all others” (dubbed Error Type 1), assigns “a statistical weight or probability” to such an association (Error Type 2), or cites “the number of samples from different individuals that could not be distinguished from one another as a predictive value to bolster the conclusion that a hair belongs to a specific individual” (Error Type 3). *Id.*

In 2015, the FBI concluded that Scholberg had committed two of these errors. First, it asserted that nine lines of testimony from the direct examination, in which Scholberg discussed the probability that hair from Butler and Mears would be indistinguishable, reflected Error Type 2. A.A. 73 (citing Trial Tr. 531, lines 8–16, reproduced at A.A. 85). Second, the FBI asserted that three lines of testimony from the re-cross, in which Scholberg disclaimed any knowledge of the probability that hair from different people would have the same microscopic characteristics, reflected Error Type 1. *Id.* (citing Trial Tr. 536, lines 9–11, reproduced at A.A. 90). At the same time, the FBI noted that Scholberg repeatedly had included “Limiting Language” in his testimony. *Id.* The FBI notified the Innocence Project and the NACDL of its conclusions, and those groups noted their agreement. DOJ then notified Butler’s counsel and waived in advance any limitations or procedural-default defenses that might otherwise apply to claims for post-conviction relief under 28 U.S.C. § 2255. The notice expressly took “no position regarding the materiality of the error in this case.” A.A. 68.

Not surprisingly, Butler moved to vacate his conviction under section 2255. He contended that Scholberg’s testimony constituted a knowing use of false evidence to convict him, and thus violated due process. The government did not dispute that some of Scholberg’s testimony was false or misleading. Nor did it dispute that the government knew, or should have known, that some of the testimony was misleading. But, the government argued, any misleading evidence was not material.

The district court denied relief on that basis. For twelve pages, the court painstakingly reviewed the evidence and arguments presented at Butler’s trial. 278 F. Supp. 3d at 463–74. The court concluded that Scholberg’s testimony was carefully hedged, *id.* at 482; that the testimony of Hill and

Robinson “remained supported by ‘overwhelming extrinsic corroboration’” even without the hair evidence, *id.* at 483 (quoting *Butler*, 481 F.2d at 535); and that the government’s entire case, “when viewed as a whole, and even without the hair testimony,” established Butler’s guilt “beyond a reasonable doubt,” *id.* at 484.

II

Under *Napue v. Illinois*, 360 U.S. 264 (1959), the government “may not knowingly use false evidence, including false testimony, to obtain a tainted conviction.” *Id.* at 269. Moreover, “[t]he same result obtains when the State, although not soliciting false evidence, allows it to go uncorrected.” *Id.* But use or allowance of false testimony does not invariably require a new trial. To the contrary, it does so only if the defendant proves materiality—*i.e.*, a “reasonable likelihood that the false testimony could have affected” the verdict. *United States v. Agurs*, 427 U.S. 97, 103 (1976); *see Giglio v. United States*, 405 U.S. 150, 154 (1972); *Napue*, 360 U.S. at 271. We have applied this settled materiality requirement in “decades of cases” under *Napue*. *United States v. Ausby*, 916 F.3d 1089, 1092 (D.C. Cir. 2019) (*per curiam*). And we have stressed that “even if the prosecution either sponsored or failed to correct false testimony, the grant of a new trial is not automatic.” *United States v. Vega*, 826 F.3d 514, 529 (D.C. Cir. 2016) (*per curiam*).

Supreme Court precedent makes this clear. The Court has found false testimony to be material in only four cases. Each time, it stressed the critical importance of the testimony to the government’s overall case. In *Alcorta v. Texas*, 355 U.S. 28 (1957) (*per curiam*), the “only eye witness” to a murder gave perjured testimony that he was not having an affair with the victim, which was “seriously prejudicial” to the defendant’s

contention that he had killed his wife only in “sudden passion,” upon discovering the affair. *See id.* at 29–32. In *Napue*, the “principal state witness” falsely denied that the government had “promised him consideration” to testify, and the conviction rested “largely” on his “extremely important” eyewitness account. *See* 360 U.S. at 265–66. In *Miller v. Pate*, 386 U.S. 1 (1967), a government chemist made a “consistent and repeated misrepresentation” that paint on the defendant’s shorts was blood, and this formed a “vital component” of the government’s case. *See id.* at 3, 6. In *Giglio v. United States*, 405 U.S. 150 (1972), the government’s case “depended almost entirely” on one “key witness,” who falsely denied that the government had promised not to prosecute him in return for his testimony. *See id.* at 151, 154–55.

In contrast, the Court has denied relief for false testimony even on critical issues, as long as the remaining evidence is sufficiently strong. In *Kaiser v. New York*, 394 U.S. 280 (1969), the prosecution falsely presented two recorded phone conversations as confessions. That misrepresentation struck at the heart of its case, which “rested principally on the content” of the conversations. *Id.* at 280. Nonetheless, the record as a whole “clearly and beyond any reasonable doubt implicated the defendant,” *People v. Kaiser*, 233 N.E.2d 818, 821 (N.Y. 1967), and the jury, which “knew the circumstances under which the incriminating statements had been made,” could itself evaluate the misrepresentation in context. *See* 394 U.S. at 281 n.5. Likewise, in *Giles v. Maryland*, 386 U.S. 66 (1967), five justices rejected two *Napue* claims for lack of materiality. *Giles* involved rape convictions resting on testimony from the victim and her date on the night at issue. A plurality would have ordered further consideration of whether the government had knowingly elicited from them false testimony about one of the defendants and about whether the victim had engaged in sexual activity with her date, who was not one of the

defendants. *See id.* at 74–76 (opinion of Brennan, J.). Although the Court remanded on other grounds, a majority held that neither *Napue* claim was material: the first involved a dispute fully aired out at trial, and the second involved at most an “inconclusive intimation” of the victim’s promiscuity, which could “scarcely have sufficed to change the trial’s outcome.” *Id.* at 111–12 (Harlan, J., dissenting); *see id.* at 82–83 (White, J., concurring in the judgment).

This Court too has confirmed that *Napue*’s materiality requirement has bite. So far as I can tell, we have found the requirement satisfied only twice in the six decades since *Napue* was decided. In *United States v. Iverson*, 637 F.2d 799 (D.C. Cir. 1980), we reversed a conviction where the government had failed to correct perjury by a “key witness” who falsely testified that she “had nothing to gain from testifying for the government.” *Id.* at 801.¹ And in *Ausby*, we set aside a conviction resting in part on expert testimony falsely stating that hair from the crime scene could be “positively” identified as the defendant’s. 916 F.3d at 1091–92. We described this testimony as “the primary evidence that directly contradicted” the position of the defense, which could “plausibly explain[]” all the government’s remaining evidence. *Id.* at 1095.

Over the same period, we rejected at least six *Napue* claims for lack of materiality. In four cases, the disputed testimony was insignificant relative to the prosecution’s overall case. *See United States v. Sitzmann*, 893 F.3d 811, 828–29 (D.C. Cir. 2018) (per curiam) (“single reference during a five-week trial ... was unlikely to have influenced the verdict, especially in light of the abundant evidence at trial” (cleaned

¹ On rehearing, we remanded the case for further factfinding on whether the defense knew that this testimony was false. *United States v. Iverson*, 648 F.2d 737 (D.C. Cir. 1981).

up)); *Vega*, 826 F.3d at 531 (false testimony was “just gilding the lily”); *United States v. Burch*, 156 F.3d 1315, 1328–29 (D.C. Cir. 1998); *United States v. Anderson*, 509 F.2d 312, 326–27 & n.110 (D.C. Cir. 1974). In a fifth case, “the [false] testimony was corrected, and [the defendant] failed to demonstrate that the misleading content of the initial testimony could nevertheless have affected the judgment of the jury.” *United States v. Straker*, 800 F.3d 570, 604 (D.C. Cir. 2015) (per curiam). In a sixth, the false testimony was immaterial because the defense received the critical evidence “in time to make effective use of it.” *United States v. Paxson*, 861 F.2d 730, 737–38 (D.C. Cir. 1988).

Butler attempts to equate *Napue*’s materiality requirement with the harmless-error rule of *Chapman v. California*, 386 U.S. 18 (1967), under which the government, to preserve a conviction despite constitutional error, must show no “reasonable possibility” that the error influenced the jury. *See id.* at 23. But “reasonable possibility” is different from “reasonable likelihood,” and a burden on the government is different from one on the defendant. We thus decisively rejected Butler’s position in *Ausby*. There, we explained that “the harmless-error standard of *Chapman*,” which applies only after a constitutional violation has been established, is substantively and conceptually different from the materiality requirement of *Napue*, which is an essential element of establishing a due-process violation in the first place. *See* 916 F.3d at 1092–94.

For their part, my colleagues embrace *Chapman* in substance, though not by name. Piecing together scattered dicta from two cases, they morph *Napue*’s materiality requirement into “a veritable hair trigger for setting aside the conviction,” *ante*, at 12 (quoting *United States v. Gale*, 314 F.3d 1, 4 (D.C. Cir. 2003)), which is “quite easily satisfied” and

would require “a virtual automatic reversal” whenever the government has offered false testimony, *id.* (quoting *United States v. Williams*, 233 F.3d 592, 594 (D.C. Cir. 2000) (citation omitted)). But *Gale* and *Williams* cannot bear that weight. Neither case set aside any conviction, on *Napue* grounds or otherwise. In *Gale*, this Court rejected a *Napue* claim because the disputed testimony was not false. *See* 314 F.3d at 3. We referenced the supposed “hair trigger” only after doing so, and only to make the undisputed point that *Napue*’s materiality requirement is less demanding than the materiality requirement for establishing a due-process violation under *Brady v. Maryland*, 373 U.S. 83 (1963), based on the government’s failure to disclose exculpatory evidence without fault. *See* 314 F.3d at 4. *Williams* is even further afield. It involved perjury discovered only after trial. There was no constitutional issue at all, but only the question of whether the “interests of justice” required a new trial under Federal Rule of Criminal Procedure 33. *See* 233 F.3d at 593. Finally, and most importantly, the dicta quoted by my colleagues do not fairly describe the six decades of case law applying *Napue*’s materiality requirement with some rigor. We should therefore reject the gloss on *Napue* suggested by *Gale* and *Williams*, just as *Ausby* rejected prior dicta mistakenly equating *Napue* to *Chapman*. *See* 916 F.3d at 1094.²

² The government failed to argue that the harmless-error rule of *Brecht v. Abrahamson*, 507 U.S. 619 (1993), should govern *Napue* claims raised under section 2255. In *Brecht*, the Supreme Court held that, on collateral review under 28 U.S.C. § 2254, courts generally should deny relief unless the constitutional error “had substantial and injurious effect or influence in determining the jury’s verdict.” 507 U.S. at 637 (quotation marks omitted). Some courts of appeals have held that *Brecht* applies to *Napue* claims, *see, e.g., United States v. Clay*, 720 F.3d 1021, 1025–27 (8th Cir. 2013), and most courts of appeals have held that *Brecht* applies to collateral review under

In this case, there is no reasonable likelihood that Scholberg’s disputed hair testimony could have affected the verdict. For one thing, even setting aside that testimony, the evidence of Butler’s guilt was overwhelming. For another, the two scraps of disputed testimony—covering twelve lines of text during a four-day prosecution—were at worst narrowly misleading and quickly cleared up by various ensuing clarifications. In the context of the government’s overall case, the disputed statements were wholly immaterial.

A

As the district court explained, the testimony of Hill and Robinson, who recounted detailed confessions made by Butler on the day of the murder, formed “the linchpin of the government’s case.” *Butler*, 278 F. Supp. 3d at 483. On direct review, this Court explained that their testimony “present[ed] a comprehensive and believable narrative” that “was supported by overwhelming extrinsic corroboration, giving substantial independent assurance of its reliability.” *Butler*, 481 F.2d at 535. Likewise, as the district court explained, even “absent the hair evidence, the testimony of these two witnesses remained supported by ‘overwhelming extrinsic corroboration.’” *Butler*, 278 F. Supp. 3d at 483 (quoting *Butler*, 481 F.2d at 535).

Butler was friends with, and supplied heroin to, Hill and Robinson. When police separately interviewed Hill and Robinson one day after the murder, both gave consistent statements reporting confessions that Butler had made to them

section 2255, *see United States v. Smith*, 723 F.3d 510, 517 (4th Cir. 2013) (collecting cases). In this circuit, both questions remain open for consideration in a case where the government raises the issue.

within one to three hours of the crime. Hill and Robinson then repeated their accounts as the star witnesses at Butler's trial.

Hill provided the fullest narrative. He testified that he called Butler between 3:00 and 3:30 p.m. on the day of the murder, looking for heroin. Over the telephone, Butler told Hill that he had just left the home of Ellen Johnson—the sister of Butler's girlfriend—where “he had just killed the rent man” for her building. S.A. 22. Johnson lived in the building where Mears's body was found. According to Hill, Butler “told me that the old man caught him selling narcotics to two boys, and the old man knocked it over and came over and flushed it.” *Id.* Hill added that Butler “told me he tied the old man up and put a stocking or something in his mouth, and was choking him with a belt, and the belt broke and he started choking him with a telephone cord.” *Id.* Finally, “he poured some water down his throat to make sure that he was dead.” *Id.* Later, around 4:00 p.m., Butler went to Hill's home and divulged more details, including how he had taken “some keys to the apartment or ... to the man's car.” *Id.* at 23. Butler also revealed that the killing took place in the bathroom of an “[u]pstairs apartment.” *Id.* at 28.

Robinson's testimony reinforced Hill's. She arrived at Hill's house around 4:30 p.m. on the day of the murder, where she found Hill and Butler using heroin. Hill told Robinson that “Dennis just killed a man.” S.A. 150. Butler then “cut in” to explain that he “had to do something,” and that “he was choking the man with a belt and the belt broke and then he started choking him with the telephone cord.” *Id.* at 150–51. According to Robinson, Hill added that Butler had killed Mears because “the man caught Dennis selling narcotics in the bathroom to two boys.” *Id.* at 152.

My colleagues note fair grounds for questioning the credibility of Hill and Robinson: both used heroin, both gave conflicting testimony about the extent of their drug use, and Robinson gave the police inconsistent statements about which details of the murder she learned directly from Butler and which she learned indirectly through Hill. *Ante*, at 13. Nonetheless, both knew and separately reported key details of the murder that they could have learned only from the murderer. Hill and Robinson each knew that the killer had choked Mears with a belt until it broke. Additionally, Hill knew that the killer had poured water down Mears's throat. And, of course, the crime scene itself established beyond any reasonable doubt that they truthfully reported these details.

My colleagues speculate that Hill and Robinson might have learned these details from Ellen Johnson and then manufactured a story to frame Butler. *Ante*, at 20–21. That is a virtual impossibility. Johnson, a sister of Butler's girlfriend, lived in a second-floor apartment in the building where Mears was killed. She testified that, when another neighbor told her of Mears's death, she went upstairs to the vacant apartment, entered it, "just stood there and looked at [the body] and came back out." S.A. 212. During this brief visit to the crime scene, Johnson noticed that Mears "had something white stuffed in his mouth and a cord around his neck and his hands were tied behind his back." *Id.* But Johnson did not go into the bathroom, bedroom, or kitchen of the apartment, and she did not "look in anything, in any of the cabinets or any of the tables or anything in the kitchen." *Id.* at 219–20. Thus, it is highly unlikely that she would have noticed (but failed to mention in her testimony) that the stocking protruding from Mears's mouth was wetter than spit would explain and then would have inferred that the murderer must have poured water down his throat. Likewise, it is virtually impossible that she would have looked in the kitchen drawer (from her position outside the

bathroom), noticed the torn belt among other random items, and inferred that it must have been a failed murder weapon used before the telephone cord finished the job. Johnson—who had no motive to shade her testimony adversely to Butler—further testified that she did not convey to Hill the details of what she saw at the crime scene. *Id.* at 215. My colleagues cite other evidence suggesting that Johnson conveyed those details to her sister Lillian Haring, who in turn conveyed them to Mary Dean (another sister, who was also Butler’s girlfriend), who in turn conveyed them to Hill. *Id.* at 450–52. Even if those various communications occurred in the hours after the murder, Johnson still cannot be the source of Hill’s and Robinson’s knowledge that the murderer tore a belt trying to strangle Mears, or Hill’s knowledge that the murderer then poured water down Mears’s throat to make sure that he was dead. The only rational account of this evidence is the obvious one: Butler confessed to Hill and Robinson, just as they testified.

Other evidence linked Butler to the crime. Many eyewitnesses placed him near the building around the time of the murder, and one even saw Butler and Mears working together on a car around 12:30 to 1:00 p.m. In addition, two weeks after the murder, Mears’s keys were found on a rooftop three doors down from the home where Butler lived with his girlfriend, almost half a mile away from where Mears was murdered. Furthermore, when Butler was arrested in the early morning of September 30, the day after the murder, his pants had a spot of aqua-colored paint. Three days before the murder, Wilson Dean, the brother of Butler’s girlfriend, was painting the apartment where the murder took place. Dean testified that he left in the apartment a pan of paint, a roller, and an open paint bucket with some cans and soda bottles inside it. When police inspected the crime scene, they found the pan, roller, and bucket. They also found aqua-colored paint stains on Mears’s coat and on a Pepsi bottle containing water and lying inside his

coat. An expert for the government testified that the paint on Butler's pants, the paint on Mears's coat, and the paint on the Pepsi bottle all were similar or identical "in color, texture, and type of paint." S.A. 342.

My colleagues seek to discount all this corroborating evidence piece by piece. Butler's presence at the apartment building, they say, could have been a coincidence. The keys, they say, could have been taken and thrown away by anyone. And the paint, they say, might have stained Butler's pants days earlier. *Ante*, at 15–16. True enough, but the individual pieces of evidence are more powerful than my colleagues acknowledge. To reiterate, Butler was seen together with Mears right outside the apartment building, within a few hours of the time of death, and Mears's keys were recovered three doors down from where Butler lived, almost half a mile away from the murder scene. As for the paint, Wilson Dean did testify that Butler "came up" to the vacant apartment as Dean was painting on the Saturday before the murder, though he "didn't stay too long." S.A. 241. But it is far less likely that such a brief visit would cause paint-stained pants than would the murderer's struggle to tie up and gag the victim, grab a soda bottle from an open paint bucket, fill it with water, and pour the water down the victim's throat. Moreover, the paint left in the apartment by Dean must have still been wet on the day of the murder; the expert testified that the paint was "applied while wet" to the clothes of both Mears and Butler, *id.* at 342, and there is no evidence suggesting that Mears might have been dabbed while Dean painted on the prior Saturday. Furthermore, Dean's testimony is incriminating in another respect. It establishes that Butler, who himself used and sold heroin, would have known that the third-floor apartment was vacant—and thus an ideal spot from which to make the sales. Finally, whatever the probative force of any one piece of evidence considered in isolation, "individual pieces of

evidence, insufficient in themselves to prove a point, may in cumulation prove it.” *Bourjaily v. United States*, 483 U.S. 171, 179 (1987). Here, these various pieces of evidence, together with the confessions reported by Hill and Robinson, make the case against Butler overwhelming.

B

Compared to all this evidence, the disputed hair testimony played only a minor role at trial. Much of Scholberg’s testimony was appropriate—and made the case against Butler even stronger. According to the FBI, Scholberg “exceeded the limits of science” in only two asserted overstatements made in twelve lines of testimony. A.A. 67–73. But these fleeting scraps were at worst confusing or ambiguous, and any marginal prejudice that they may have caused was immediately cured by corrective and cautionary statements from the prosecution, from defense counsel, and from Scholberg himself—including in twenty-five lines of testimony that the FBI itself recognized as appropriate “Limiting Language.” *Id.* at 73.

In his direct testimony, Scholberg began by explaining the basics of microscopic hair analysis, through which samples of hair can be classified as similar or dissimilar in some sixteen different respects. After explaining that the hair taken from Mears’s clothing and the hair samples taken from Butler were similar in all those respects, Scholberg offered the measured and appropriate conclusion that the hair from Mears’s clothing “could have come from the head of the defendant.” A.A. 84. Scholberg then elaborated on why he had hedged his conclusion:

Now, I say could have because hairs do not contain enough identifying characteristics to be positively identified as originating from a certain head of a certain individual to the exclusion of all other

individuals in this race group. *This is not a positive identification.* My testimony is they are the same or alike in all the microscopic characteristics that were available to me.

Id. (emphasis added). Measured against the DOJ guidelines on appropriate and inappropriate uses of hair evidence, this testimony was permissible—indeed, it was exemplary.

The first snippet deemed by the FBI to be false involved eight lines of testimony immediately after this passage, at the end of the direct examination. After Scholberg explained his inability to make a positive identification, the prosecutor asked him “how likely or how unlikely is it for two hairs to be microscopically alike, yet come from different people?” A.A. 85. A direct response could have amounted to Error Type 2, had it offered any “probability” that the hair found on Mears’s clothing belonged to Butler. *Id.* at 101. But Scholberg’s answer was nonresponsive. He stated that, in his roughly 10,000 examinations, there were only “four or five times when the hair of the *suspect* and the hair of the *victim* was so nearly alike ... that I was unable to come to a conclusion as to where these hairs originated.” *Id.* at 85 (emphases added). This suggested a very low probability that the hair of Mears and Butler would be indistinguishable. But as defense counsel stressed in closing argument, Mears and Butler were different races, their hair looked entirely different, and nobody had argued to the contrary. In other words, far from *overstating* the likelihood that the hair found on Mears’s clothing belonged to *Butler*, Scholberg’s nonresponsive answer tended to *rule out* that the hair belonged to *Mears*—a possibility not at issue in the case. In context, any overstatement in Scholberg’s direct testimony was immaterial.

In any event, immediately after this garbled exchange, the defense cleared up any confusion and thus cured any prejudice. At the beginning of the cross-examination, defense counsel shifted attention away from the question whether “the hair of the defendant and the hair of the victim” were alike. A.A. 85. Counsel then elicited further testimony stressing Scholberg’s limited ability to connect the crime-scene hair to Butler:

Q: But, your testimony is that you cannot say positively that ... the known hair from Mr. Butler is the same as the hair that was taken from the clothes of the decedent, Mr. Mears? You cannot say positively?

A: That these hairs originated from the head of the defendant?

Q: Right.

A: That is correct.

Q: They could have originated from someone else’s head as well?

A: If all of the characteristics were the same, yes.

Q: That could be any number of people. You don’t have any idea how many people that could be?

A: I have no statistics to illustrate this any further, no.

Id. at 86. This testimony was clear, perfectly appropriate, consistent with DOJ guidelines, and recognized by the FBI as proper “Limiting Language.” *Id.* at 73.

The second snippet flagged by the FBI is even more obviously immaterial. It involved a small portion of the re-cross, the entirety of which is this:

Q: The relevant statistical comparison would not be between the victim's hair and the defendant's hair. It would be between the microscopic identification you could make of one hair and the rest of the community that might have the same kind of hair. In other words, we don't know how many other people have the same microscopic characteristics of their hair follicles as the one that you identified as Mr. Butler's hair from the clothing of Mr. Mears, isn't that correct?

A: Yes, that is correct. I have no idea whether anyone would have the same microscopic characteristics.

Q: It could be no one or it could be 200 people.

A: It could be no one or it could be someone. I don't have any basis to ... assign a number to it. That is correct.

A.A. 90. The obvious takeaway points are that (i) the dissimilarity of Butler's hair and Mears's hair is beside the point, and (ii) the probability that the crime-scene hair was Butler's is unknown. None of that is problematic, and the FBI itself designated three lines of this testimony as appropriate "Limiting Language." *Id.* at 73. Yet the FBI still found Error Type 1—associating crime-scene hair to Butler "to the exclusion of all others"—from the three lines of testimony in which Scholberg indicated agreement with the statement that "we don't know how many other people have the same microscopic characteristics of their hair follicles as the one *that you identified as Mr. Butler's hair* from the clothing of Mr. Mears." *Id.* at 71–73, 90 (emphasis added). This makes no

sense. Any overstatement, in suggesting that Scholberg had previously identified the crime-scene hair as Butler's, was built into a long, leading question formulated by defense counsel. By casually answering "Yes, that is correct," Scholberg made at worst an invited error, which is hardly grounds for setting aside a conviction. *See, e.g., United States v. Ginyard*, 215 F.3d 83, 88 (D.C. Cir. 2000) (per curiam). In any event, the thrust of the exchange was not to suggest that Scholberg had positively identified Butler as the murderer. Precisely the opposite: defense counsel posited that "we don't know how many other people" have hair microscopically indistinguishable from Butler's, and Scholberg repeatedly agreed that he had "no idea." A.A. 90. This disputed testimony is actually helpful to Butler.

In fairness, I should note that the short redirect examination raises two similar concerns, although the FBI did not identify it as containing any false testimony. First, Scholberg briefly repeated the point that he could almost never fail to distinguish the hair of a defendant from that of a victim. For the reasons explained above, that statement is immaterial in this case, even if slightly misleading. Second, the prosecutor asked whether Scholberg was testifying that the crime-scene hair was "only similar" to Butler's. A.A. 89. Scholberg responded: "No, I am not. When you imply that something is similar, you are implying that it is also different in some respects. My report and my testimony is that these hairs are the same. They are alike in all identifiable microscopic characteristics." *Id.* In isolation, this exchange might misleadingly suggest that Scholberg could positively identify the crime-scene hair as Butler's. But all Scholberg said was that the hairs "are alike in all identifiable microscopic characteristics," and his direct examination explained at length why that did not and could not amount to a positive identification. Moreover, defense counsel immediately cleared

up this point in the re-cross, where Scholberg twice acknowledged that he could not positively identify the crime-scene hairs as belonging to Butler—or even estimate the probability that they belonged to Butler.

Closing argument reveals much the same pattern: the hair evidence played a small role in the government’s overall case, and any overstatements were at worst fleeting, marginally misleading, and amply corrected. The government addressed hair evidence in barely more than one page of its 25-page closing. Moreover, its discussion of that evidence was carefully hedged. The government reminded the jury that Scholberg “couldn’t say whose hair it was,” and it merely asked the jury to “consider” the hair evidence rather than to “find [Butler] guilty on that evidence.” S.A. 495–96. In contrast, the government described Hill’s and Robinson’s knowledge of the torn belt and Hill’s knowledge of the water in Mears’s throat as “pivotal.” *Id.* at 530. Likewise, the government called the discovery of the keys next to Butler’s home “very crucial.” *Id.* at 492. The government did briefly mention the four-in-ten-thousand probability of “two different people” having microscopically indistinguishable hair. *Id.* at 496. But in Butler’s closing argument, after reminding the jury yet again that Scholberg “could not testify that it was Dennis Butler’s hair,” defense counsel hammered away—at length and with great effectiveness—at the irrelevance of Scholberg’s one statement of probability:

Now, ladies and gentlemen there was some testimony regarding the hair and four out of ten thousand. Let’s get that straight. The FBI expert testified that out of ten thousand cases that he handled only in four cases was the hair of the decedent and the hair of the suspect alike. That is what he testified to. I want you to remember that. From all of the testimony adduced

from the stand there is no question but that the decedent was a white man and Dennis Butler is a black man. There can be no similarity of hair. So he can add ten thousand to five. Keep that in mind. The Government tried to change that testimony around but that is what the record shows.

Id. at 520. My colleagues note that the government, in its closing argument and rebuttal, stressed that the crime-scene hair and Butler’s hair were “the same in every microscopic detail” or characteristic. *Id.* at 495–96, 535; *ante*, at 9. But this did not highlight false testimony at all. Instead, it reflected the legitimate use of expert testimony that Butler, because his hair matched the crime-scene hair in all microscopically observable respects, could fairly be “included ... as a possible source” of that hair. A.A. 101.

C

This case is unlike any other in which we or the Supreme Court have found false testimony to be material. Scholberg’s disputed statements do not amount to perjury by “the only eye witness to the killing.” *Alcorta*, 355 U.S. at 29. Nor do they involve lies about plea deals secretly offered to key fact witnesses. *Giglio*, 405 U.S. at 151; *Napue*, 360 U.S. at 265; *Iverson*, 637 F.2d at 801. And they are nothing like false testimony that paint stains were blood stains. *Miller*, 386 U.S. at 6. To the contrary, like the disputed testimony in *Sitzmann*, they involve brief comments made during a lengthy trial and dwarfed by “abundant evidence” of guilt. *See* 893 F.3d at 829.

Moreover, *Napue* involved only “uncorrected” false testimony, 360 U.S. at 269, which jurors are “not themselves in a position to evaluate,” *Kaiser*, 394 U.S. at 282 n.5. *See Long v. Pfister*, 874 F.3d 544, 548 (7th Cir. 2017) (en banc) (“All *Napue* itself holds is that perjury known to the

prosecution must be corrected before the jury retires.”). Here, in contrast, any misleading testimony was quickly corrected, so Butler had to show “that the misleading content of the initial testimony could nonetheless have affected the judgment of the jury.” *Straker*, 800 F.3d at 604. In any case involving corrected testimony, that would be an uphill battle. *See, e.g., United States v. Chavez*, 894 F.3d 593, 601 (4th Cir. 2018) (“It is difficult to imagine how a conviction could have been ‘obtained by the knowing use of perjured testimony’ when that testimony was almost immediately corrected by the witness himself.”); *United States v. Joyner*, 201 F.3d 61, 82 (2d Cir. 2000) (“cross-examination and jury instructions regarding witness credibility will normally purge the taint of false testimony”); *United States v. Cassino*, 467 F.2d 610, 622 (2d Cir. 1972) (“the fact that the jury learned the details of the story precludes a successful [*Napue*] challenge”). Here it is an impossibility, given the amount of independent incriminating evidence, the fleeting and marginal nature of any misleading statements, and the promptness and thoroughness of the ensuing corrections.

Finally, Butler can take no refuge in *Ausby*. There, the disputed testimony constituted “the primary evidence that directly contradicted [the] defense theory,” which “plausibly explained the remaining evidence” presented by the government. 916 F.3d at 1095. But here, there was a mountain of untainted evidence that the defense could not plausibly explain away. Moreover, the improper testimony in *Ausby* “played a key role” at trial, as “borne out by the prosecution’s emphasis” of the point that the hair evidence amounted to a “positive” identification. *Id.* Here, in contrast, the prosecution disavowed such an overstatement, and the hair evidence played a much smaller part in the overall case. If *Ausby* was by its

own reckoning a borderline case of materiality, *see* 916 F.3d at 1094–95, then Butler’s case falls far short.³

* * * *

Because Butler failed to show that the disputed hair evidence in this case was material, we should affirm the district court’s judgment declining to set aside his sentence. Firmly but respectfully, I dissent.

³ My colleagues contend that *Ausby* is indistinguishable because, there as well as here, the hair testimony was equivocal and other evidence of guilt was strong. *Ante*, at 22–24. But in his closing rebuttal, the prosecutor in *Ausby* argued that hair-comparison evidence “‘is not a positive means of identification *but it amounts to a positive means here.*’” 916 F.3d at 1095 (emphasis added) (quoting rebuttal argument). This in turn built on expert testimony that the crime-scene hair matching the defendant’s hair had “unusual” characteristics present in “less than five percent” of individuals of the defendant’s race. *United States v. Ausby*, 275 F. Supp. 3d 7, 16 (D.D.C. 2017), *rev’d*, 916 F.3d 1089 (D.C. Cir. 2019). Under the FBI’s current thinking, that was an obvious Error Type 2—and was quite unlike any testimony given by Scholberg. Other evidence made clear that Ausby had entered the victim’s apartment and exited it through a window, either on or shortly before the day of the murder. *See* 916 F.3d at 1091. We concluded that the defense theory—that Ausby had burgled the apartment a few days before, when he was seen loitering in the apartment building—“plausibly explained” the evidence. *Id.* at 1095. In contrast, Butler has no plausible innocent explanation of how Hill and Robinson could have known about the torn belt or how Hill could have known about the water poured down Mears’s throat.