

Christopher Mooney v. State of Maryland, No. 32, September Term, 2023

**“REASONABLE JUROR” TEST – AUTHENTICATION THROUGH TESTIMONY OF WITNESS WITH KNOWLEDGE UNDER MARYLAND RULE 5-901(b)(1) – AUTHENTICATION THROUGH CIRCUMSTANTIAL EVIDENCE UNDER MARYLAND RULE 5-901(b)(4)** – Supreme Court of Maryland held that “reasonable juror” test applies to authentication of videos—*i.e.*, for trial court to admit video, there must be sufficient evidence for reasonable juror to find by preponderance of evidence that video is what it is claimed to be. Supreme Court concluded that video can be authenticated through circumstantial evidence under Maryland Rule 5-901(b)(4).

Supreme Court held that trial court did not abuse its discretion in admitting video, as video was properly authenticated through combination of testimony of witness with knowledge under Maryland Rule 5-901(b)(1) and circumstantial evidence under Maryland Rule 5-901(b)(4), and reasonable juror could find by preponderance of evidence that video was what it purported to be—namely, fair and accurate video of shooting and events surrounding it.

Supreme Court concluded that portions of video depicting events that victim saw or participated in were properly authenticated through victim’s testimony under Maryland Rule 5-901(b)(1), as witness with knowledge of events; and portion of video depicting shooting (which victim did not see) was properly authenticated through circumstantial evidence under Maryland Rule 5-901(b)(4), as there was circumstantial evidence from which reasonable juror could have inferred that video fairly and accurately depicted shooting.

Circuit Court for Baltimore City  
Case No. 121280030

Argued: June 3, 2024

IN THE SUPREME COURT  
OF MARYLAND

No. 32

September Term, 2023

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CHRISTOPHER MOONEY

v.

STATE OF MARYLAND

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Fader, C.J.  
Watts  
Booth  
Biran  
Gould  
Eaves  
Hotten, Michele D. (Senior  
Justice, Specially Assigned),

JJ.

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Opinion by Watts, J.  
Fader, C.J., concurs.  
Gould, J., dissents.

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Filed: August 13, 2024

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Gregory Hilton, Clerk

In this case, we must determine whether video footage can be authenticated through circumstantial evidence rather than by methods that have been described as the “pictorial testimony” or the “silent witness” theories of authentication, which require testimony by a witness with personal knowledge of the content of the video or testimony concerning the method of production of the video, respectively. More specifically, the question in this case is whether video footage was properly authenticated through circumstantial evidence where a witness who testified about the content of the video did not have personal knowledge of all of the events depicted in the video. In addition, we must determine whether the “reasonable juror” test—under which there must be sufficient evidence for a reasonable juror to find in favor of authentication by a preponderance of the evidence—applies to authentication of videos. See State v. Sample, 468 Md. 560, 597, 228 A.3d 171, 194 (2020).

Maryland Rule 5-901(a) provides that “[t]he requirement of authentication or identification as a condition precedent to admissibility is satisfied by evidence sufficient to support a finding that the matter in question is what its proponent claims.” Maryland Rule 5-901(b) sets forth a nonexclusive list of ways to authenticate evidence. Under Maryland Rule 5-901(b)(1), evidence can be authenticated through the testimony of a witness with knowledge that the evidence is what it is claimed to be. Under Maryland Rule 5-901(b)(4), evidence can be authenticated through “[c]ircumstantial evidence, such as appearance, contents, substance, internal patterns, location, or other distinctive characteristics, that the offered evidence is what it is claimed to be.”

We have previously discussed three theories of authentication for videos. See Dep’t

of Pub. Safety & Corr. Servs. v. Cole, 342 Md. 12, 20-21, 30, 672 A.2d 1115, 1119-20, 1124 (1996). First, under the “pictorial testimony” theory of authentication, a video can be authenticated where a “witness testifies from first-hand knowledge that the [video] fairly and accurately represents the scene or object it purports to depict as it existed at the relevant time.” Id. at 20-21, 672 A.2d at 1119 (cleaned up). The “pictorial testimony” theory of authentication corresponds to Maryland Rule 5-901(b)(1).

Second, under the “silent witness” theory of authentication, a video can be authenticated where there is “an adequate foundation assuring the accuracy of the process producing” the video. Cole, 342 Md. at 21, 672 A.2d at 1119-20 (cleaned up). Such a foundation can be laid where, for instance, a witness testifies about “the type of equipment or camera used, its general reliability, the quality of the recorded product, the process by which it was focused, or the general reliability of the entire system.” Jackson v. State, 460 Md. 107, 117, 188 A.3d 975, 981 (2018) (cleaned up). The “silent witness” theory of authentication corresponds to Maryland Rule 5-901(b)(9), under which an exhibit can be authenticated through “[e]vidence describing a process or system used to produce the proffered exhibit or testimony and showing that the process or system produces an accurate result.”<sup>1</sup>

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<sup>1</sup>We have also explained that a video can be authenticated as a business record. See Cole, 342 Md. at 30, 672 A.2d at 1124. This theory of authentication corresponds to Maryland Rule 5-902(12), under which an exhibit is considered self-authenticating where, among other conditions, the exhibit satisfies the requirements for the “business record” hearsay exception under Maryland Rule 5-803(b)(6). One of those requirements is establishing that “the regular practice of [the] business was to make and keep the” exhibit. Md. R. 5-803(b)(6)(D).

In the Circuit Court for Baltimore City, after a trial by jury, Petitioner, Christopher Mooney, was found guilty of second-degree assault, reckless endangerment, possession of a regulated firearm after conviction of a disqualifying crime, wearing, carrying, or transporting a handgun, illegal possession of ammunition, and discharging a firearm in Baltimore City. The events underlying the verdict involved the nonfatal shooting of Joshua Zimmerman in his vehicle outside of a medical cannabis dispensary in Baltimore City. As a witness for the State, Mr. Zimmerman testified that he was shot in the back while sitting in the driver's seat of his vehicle. Over objection, during Mr. Zimmerman's direct examination, the circuit court admitted into evidence a video, retrieved by a detective, that had been recorded by a camera mounted on the exterior wall of a residence near the site of the shooting.<sup>2</sup> The video was 1 minute and 51 seconds long.

Before admission of the video, Mr. Zimmerman testified that, in the months prior to the shooting, he had suspected Mr. Mooney of sleeping with his girlfriend, but Mr. Mooney had denied the allegation. Mr. Zimmerman testified that, on the night of the shooting, Mr. Mooney walked past his vehicle and the two had a brief exchange of words in which he called Mr. Mooney a "b[\*\*\*\*]." Mr. Zimmerman testified that Mr. Mooney walked past his vehicle immediately before the shooting and that, after Mr. Mooney passed the vehicle, he was shot from behind. Mr. Zimmerman did not testify that he saw the shooter at the time of the shooting.

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<sup>2</sup>In his brief in this Court, Mr. Mooney states that "[t]he incident was purportedly captured on a 'Ring' camera from a nearby residence and a copy of the video was recovered by police." The video itself displays the Xfinity logo in the upper-right corner.

Mr. Zimmerman testified that he had watched the video in preparation for trial and that the video was a true and accurate depiction of the events that occurred on the night of the shooting and did not appear to have been altered or edited. After the video was admitted into evidence, Mr. Zimmerman identified Mr. Mooney as the person depicted on the video in the white shirt “walking around” and confirmed that the footage depicted him exiting the vehicle holding his back, because that is where he was shot, and running to a nearby McDonald’s. During the State’s closing argument, the prosecutor contended that the video showed Mr. Mooney walk past Mr. Zimmerman’s vehicle and shoot him from behind.

In this Court, Mr. Mooney contends that, although the methods of authentication listed in Maryland Rule 5-901(b) are non exhaustive, none of the methods are universally applicable. Mr. Mooney asserts that the Appellate Court of Maryland erred in concluding that video evidence could be authenticated through circumstantial evidence under Maryland Rule 5-901(b)(4) and that this Court’s holding in Sample, 468 Md. at 567-68, 228 A.3d at 176, and the “reasonable juror” test do not apply to authentication of video evidence. Mr. Mooney’s position is that our decision in Washington v. State, 406 Md. 642, 652, 961 A.2d 1110, 1116 (2008), stands for the proposition that video footage can be authenticated under only two methods, which he summarizes as follows: the “pictorial testimony” theory, which “requires a human being to be able to swear they personally perceived what the photograph portrayed[,]” and the “silent witness” theory, under which “a witness can speak to the reliability and authenticity of the system used to procure the video, thus permitting the video to speak for itself.” (Cleaned up).

The State responds that the “pictorial testimony” and “silent witness” methods of

authentication are not the exclusive ways to authenticate video footage. The State argues that “the authentication rule requires only that a ‘reasonable juror’ could find that a particular item is what the proponent claims it to be.” The State maintains that a variety of cases from federal and other State courts, as well as decisions of the Appellate Court, permit authorization of video footage by means that include circumstantial evidence.

We hold that, for video footage to be admissible, as with other evidence, there must be sufficient evidence for a reasonable juror to find by a preponderance of the evidence that the video is what it is claimed to be. In other words, the “reasonable juror” test applies to authentication of videos—*i.e.*, for a trial court to admit a video, there must be sufficient evidence for a reasonable juror to find more likely than not that the evidence is what it is purported to be. In addition, we hold that, like other evidence, video footage can be authenticated in a variety of ways, including through circumstantial evidence under Maryland Rule 5-901(b)(4).

We conclude that the video footage at issue in this case was properly authenticated through a combination of the testimony of a witness with knowledge under Maryland Rule 5-901(b)(1) and circumstantial evidence under Maryland Rule 5-901(b)(4), as a reasonable juror could have found by a preponderance of the evidence that the video was what it purported to be—namely, a fair and accurate depiction of Mr. Zimmerman’s shooting and the events occurring before and after it. The parts of the video depicting the events that Mr. Zimmerman saw, or participated in, before and after the shooting were properly authenticated through his testimony under Maryland Rule 5-901(b)(1) as a witness with personal knowledge of the events.

The part of the video depicting the shooting was properly authenticated through circumstantial evidence under Maryland Rule 5-901(b)(4), as there was sufficient circumstantial evidence from which a reasonable juror could have inferred that the video fairly and accurately depicted the shooting. The close temporal proximity of the shooting to the events occurring immediately before and after the shooting, of which Mr. Zimmerman had personal knowledge, gave rise to the reasonable inference that the video accurately depicted the shooting. In addition, Mr. Zimmerman testified that the video truthfully and accurately depicted the events that he saw and did not appear to have been edited or altered. There also was evidence of the nature and origin of the video, from which a reasonable juror could have inferred that the video was recorded the night of the shooting by a source or third party not connected to law enforcement or involved with the shooting, as a detective testified that he obtained the video from an individual who lived nearby and had a camera mounted on the exterior wall of his residence.

These circumstances are not intended to be exhaustive or all inclusive of the circumstances that may permit authentication of video footage under Maryland Rule 5-901(b)(4). The authentication of video footage involves a fact-specific inquiry that will vary from case to case. As with all determinations with respect to authentication under Maryland Rule 5-901(b), a trial court must assess on a case-by-case basis whether there is sufficient evidence for a reasonable juror to conclude more likely than not that video footage is what the proponent claims it to be.

For the reasons discussed below, we conclude that the circuit court did not abuse its discretion in admitting the video and affirm the judgment of the Appellate Court of



Maryland.

## **BACKGROUND**

### **Proceedings in the Circuit Court**

The State charged Mr. Mooney with multiple offenses, including attempted first-degree murder of Mr. Zimmerman. At trial, as a witness for the State, Mr. Zimmerman testified as follows. He and Mr. Mooney met each other at least approximately a decade before trial. Sometime during the summer of 2021, Mr. Zimmerman asked Mr. Mooney whether he and Mr. Zimmerman's girlfriend, who is also the mother of Mr. Zimmerman's child, were "sleeping around." Mr. Mooney responded that they were not, which Mr. Zimmerman believed to be a lie because his girlfriend later admitted that she and Mr. Mooney were sleeping together.

On the evening of September 3, 2021, around 8:30 p.m. or 9:00 p.m., Mr. Zimmerman purchased medical cannabis from a dispensary on Falls Road in the Hampden neighborhood of Baltimore City. Mr. Zimmerman returned to his vehicle, which was parked on Falls Road, and telephoned his girlfriend. Within a few minutes of finishing the call, Mr. Zimmerman saw Mr. Mooney walking down the street toward him. The area had lights. Mr. Zimmerman had the windows of his vehicle rolled down, and nothing was obstructing his view of Mr. Mooney, who was not wearing a face mask. Mr. Mooney asked Mr. Zimmerman: "[W]hat's up[?]" Mr. Zimmerman responded: "[Y]ou're a b[\*\*\*\*.]"

Mr. Mooney "slowed down, like he was about to say something." But, instead of saying anything, Mr. Mooney kept walking until he was out of Mr. Zimmerman's sight. Mr. Zimmerman thought that Mr. Mooney was going to approach the driver's side of his

vehicle, so he opened the door of his vehicle and looked around, but he did not see Mr. Mooney. As soon as Mr. Zimmerman sat back in the driver's seat, he heard gunshots and was shot. Mr. Zimmerman testified: "I cracked my door and I'm looking out and I didn't see him. As soon as I sat back that's when the gunshots happened." Mr. Zimmerman suffered a wound to his back.

Before requesting that the video be admitted into evidence, the prosecutor displayed an image from the video, which had been marked for identification as State's Exhibit 1A, and asked Mr. Zimmerman whether he recognized it. Mr. Zimmerman responded that he did and explained that the image showed him in his vehicle, the dispensary, a few houses, and a parking lot. Next, the following exchange occurred:

[PROSECUTOR:] And is this an accurate depiction of the night?

[MR. ZIMMERMAN:] Absolutely.

[PROSECUTOR:] Okay. And it's a true depiction of what you recall?

[MR. ZIMMERMAN:] Yes.

[PROSECUTOR:] It doesn't look like there's been any alterations or edits  
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[MR. ZIMMERMAN:] Absolutely.

[PROSECUTOR:] -- to it? Okay.

\* \* \*

[PROSECUTOR:] [T]his is what you know to be the 3900 block of Falls Road?

[MR. ZIMMERMAN:] Yes, sir.

[PROSECUTOR:] Okay. I will play little bit for you as well. (Playing 1A

for the witness.) And does there appear to be any edits or changes to the video as I played it for you?

[MR. ZIMMERMAN:] No.

(Paragraph breaks omitted).

The prosecutor offered the video, State's Exhibit 1A, into evidence, and Mr. Mooney's counsel objected. The circuit court initiated a bench conference, during which the following exchange occurred regarding authentication of the video:

[MR. MOONEY'S COUNSEL]: I mean, there's no way to know if that video's been altered. It's somebody else's Ring camera. These aren't still photographs of what happened.

THE COURT: Has he watched it?

[MR. MOONEY'S COUNSEL]: I mean --

THE COURT: I don't think that's necessarily --

[MR. MOONEY'S COUNSEL]: And that was other --

THE COURT: -- a difference between still photographs and[] video. If he's able to authenticate it, he's able to authenticate it, but I don't[ --]

[MR. MOONEY'S COUNSEL]: Right. But I don't know that he watched the whole thing either --

THE COURT: I don't know either.

[MR. MOONEY'S COUNSEL]: -- which is what I wanted to voir dire him on.

THE COURT: Yeah.

[PROSECUTOR]: He has watched it in view, in preparation of this trial, he has --

THE COURT: Well, you -- you can ask him all that before, you haven't laid the appropriate foundation for it yet. I don't know if that video --

[PROSECUTOR]: He's authenticated it as to be the date and the time of the incident, it was a true and accurate reflection of that date and time.

THE COURT: There are other questions you need to ask him, like, has he watched it.

[PROSECUTOR]: Okay.

THE COURT: And is it a fair and accurate representation of what happened. I mean, I'm not trying --

[PROSECUTOR]: Okay.

THE COURT: Ask some more foundational questions.

[PROSECUTOR]: Sure.

After the bench conference concluded, the following exchange occurred between the prosecutor and Mr. Zimmerman:

[PROSECUTOR:] Did you watch this video in preparation?

[MR. ZIMMERMAN:] Yes, I did.

[PROSECUTOR:] Okay. And after seeing that video[,] was that a true and accurate depiction of the events that occurred that day?

[MR. ZIMMERMAN:] Yes.

[PROSECUTOR:] And there was nothing that was changed or altered?

[MR. ZIMMERMAN:] No.

[PROSECUTOR:] From your recollection thereof?

[MR. ZIMMERMAN:] No.

The prosecutor again offered State's Exhibit 1A into evidence, and the circuit court stated that it would admit the exhibit over objection. The video, which lasts 1 minute and 51

seconds, was played for the jury.

In his brief in this Court, Mr. Mooney described the content of the video as follows:

State's #1A is a 1 minute and 51 second video showing a black SUV parked on the street with what appears to be a person in the front driver's seat of the vehicle. A person in a white shirt walks up the street, passing by the SUV on the passenger side, and then walks past the vehicle. That person appears to stop, turn around, pull something from their waist, walk back towards the rear of the black SUV point something at the rear of the SUV, raise their hand and a few flashes come from the object in the person's hand. The person then turns and quickly walks off the screen to the right. The person in the driver's seat of the black SUV gets out of the SUV and walks quickly in the other direction off camera crossing the street. That same person returns later to the black SUV and appears to be talking on a phone. (State's #1A "Mooney\_Shooting\_video.dat").

While the video was being played for the jury, the following exchange occurred between the prosecutor and Mr. Zimmerman:

[PROSECUTOR:] Now, Mr. Zimmerman, I'm going to ask who is that individual in the white shirt walking around?

[MR. ZIMMERMAN:] Uh, that was, um, Christopher Mooney.

[PROSECUTOR:] In the white shirt?

[MR. ZIMMERMAN:] In the white shirt?

[PROSECUTOR:] Correct.

[MR. ZIMMERMAN:] I don't -- I don't know. I just know of him, that's it.

[PROSECUTOR:] Who was the individual that exited the driver's seat of the SUV?

[MR. ZIMMERMAN:] Oh, that was me.

[PROSECUTOR:] Okay.

[MR. ZIMMERMAN:] I had a pink shirt on.

[PROSECUTOR:] Okay. Pink, my apologies --

[MR. ZIMMERMAN:] Yeah, pink --

[PROSECUTOR:] -- my eyes --

[MR. ZIMMERMAN:] -- shirt on.

[PROSECUTOR:] Um, and were you holding your back?

[MR. ZIMMERMAN:] Yes.

[PROSECUTOR:] Why were you holding your back?

[MR. ZIMMERMAN:] Um, because that's where I was hit at with the bullet.

After the video had been played, the following exchange occurred:

[PROSECUTOR:] Now, Mr. Zimmerman, we saw you run off the screen in State's Exhibit 1A, correct?

[MR. ZIMMERMAN:] Yes.

[PROSECUTOR :] Okay. Where did you run off to?

[MR. ZIMMERMAN:] I ran to the McDonald[']s.

[PROSECUTOR:] Okay.

Mr. Zimmerman identified Mr. Mooney as the person in the video wearing the white shirt and identified himself as the person in the pink shirt. The circuit court also admitted into evidence, without objection, two other videos, identified as State's Exhibits 1B and 2, and the videos were played for the jury. Mr. Zimmerman testified that State's Exhibit 1B showed Mr. Mooney in front of an SUV. State's Exhibit 1B does not show the shooting.<sup>3</sup>

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<sup>3</sup>During the State's closing argument, however, the prosecutor indicated that three shots could be heard in State's Exhibit 1B. State's Exhibit 1A did not have audio.

Mr. Zimmerman testified that State's Exhibit 2 showed the inside of the McDonald's near the dispensary, where he went after he was shot.

As a witness for the State, Detective Victor Liu of the Baltimore Police Department testified that, on September 3, 2021, he responded to a report of "a shooting incident in the 3900 block of Falls Road." There, Detective Liu saw an SUV with bullet holes in the back and whose rear window had been "shot out." Detective Liu testified that Mr. Zimmerman said that Mr. Mooney shot him.

The prosecutor displayed an image from State's Exhibit 1A and asked Detective Liu whether he recognized it. Detective Liu responded that he did and explained that the image was from "the video [that he] recovered from the crime scene." Detective Liu testified that, when responding to a crime scene, the first thing that officers do is identify "possible witnesses and look for cameras[.]" Detective Liu testified: "[It] just so happened this gentleman had a camera that's mounted on an exterior wall . . . of his residence, so [ ] I spoke with the [ ] individual who provided that [ ] footage for me[.]"

The jury found Mr. Mooney guilty of second-degree assault, reckless endangerment, and gun offenses.<sup>4</sup> Mr. Mooney was sentenced to 10 years of imprisonment for second-degree assault, 15 years consecutive for possession of a firearm by a prohibited person, with the first 5 years to be served without parole, 3 years consecutive for possession of a handgun, and 1 year concurrent for both possession of ammunition by a prohibited person

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<sup>4</sup>The jury found Mr. Mooney not guilty of attempted first-degree murder, attempted second-degree murder, and first-degree assault.

and discharging a firearm in Baltimore City.<sup>5</sup> Mr. Mooney appealed.

### **Opinion of the Appellate Court of Maryland**

The Appellate Court of Maryland affirmed Mr. Mooney’s convictions, explaining that the video was properly authenticated through the testimony of a witness with knowledge under Maryland Rule 5-901(b)(1) and under Maryland Rule 5-901(b)(4), which provides that evidence can be authenticated by circumstantial evidence. See Christopher Mooney v. State, No. 1561, Sept. Term, 2022, 2023 WL 6783388, at \*5 (Md. App. Ct. Oct. 13, 2023). The Appellate Court did not adopt Mr. Mooney’s position that the foundational requirements for authentication were not met because Mr. Zimmerman could not authenticate the video under the “pictorial testimony” method of authentication, as he was not a witness to the entirety of the video. See id. at \*4. The Appellate Court stated that “videos may be authenticated under several theories, including the ‘pictorial testimony’ theory[.]” Id. at \*2 (cleaned up). The Appellate Court explained that the test for authentication of a video is not as strict as Mr. Mooney contended, as there need only be sufficient evidence for a reasonable juror to determine that the video is what the proponent claims. See id. \*2, \*4. The Appellate Court concluded that the circuit court did not abuse its discretion in admitting the video and that, although Mr. Zimmerman did not see the shooter at the time that he was shot, that circumstance went to the weight to be given Mr.

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<sup>5</sup>The reckless endangerment conviction merged with the second-degree assault conviction for sentencing purposes.



Zimmerman’s testimony, not the admissibility of the video. See id. at \*5.<sup>6</sup>

### **Petition for a Writ of *Certiorari***

On November 30, 2023, Mr. Mooney petitioned for a writ of *certiorari*, raising the following issue: “Whether the Appellate Court lowered the requirement for authentication of video evidence through the ‘pictorial testimony theory’ of admission when the authenticating witness did not witness the entirety of the events depicted in it?” On February 16, 2024, we granted the petition. See *Mooney v. State*, 486 Md. 387, 310 A.3d 651 (2024).

## **DISCUSSION**

### **A. Standard of Review**

An appellate court reviews for abuse of discretion a trial court’s determination as to whether an exhibit was properly authenticated. See *Sample*, 468 Md. at 588, 228 A.3d at 189; *Sublet v. State*, 442 Md. 632, 676, 113 A.3d 695, 721 (2015); *Griffin v. State*, 419 Md. 343, 357, 19 A.3d 415, 423 (2011).

### **B. Authentication of Evidence: The “Reasonable Juror” Test**

“[T]he bar for authentication of evidence is not particularly high.” *Sublet*, 442 Md. at 666, 113 A.3d at 715 (cleaned up). In *Sublet*, id. at 638, 113 A.3d at 698, we adopted a straightforward test for authentication of social media evidence, holding that, “to authenticate evidence derived from a social networking website, the trial judge must

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<sup>6</sup>The Appellate Court also held that Mr. Mooney preserved for appellate review his contention that the video was not properly authenticated. See *Mooney*, 2023 WL 6783388, at \*4. That issue is not before us.

determine that there is proof from which a reasonable juror could find that the evidence is what the proponent claims it to be.” We applied the “reasonable juror” test to authentication of social media evidence in Sublet, and, subsequently, in Sample, 468 Md. at 567-68, 228 A.3d at 176, we concluded that the preponderance of the evidence standard applies to the “reasonable juror” test.

The history of the “reasonable juror” test in our case law began even earlier, with Griffin, 419 Md. 343, 19 A.3d 415. In Griffin, id. at 357-58, 19 A.3d at 423-24, we held that the trial court abused its discretion in admitting the social media evidence at issue.<sup>7</sup> We declined to establish a bright-line test for authentication of social media evidence. See id. at 363, 19 A.3d at 427. Rather, we discussed a variety of ways in which social media evidence could be authenticated, such as through testimony of a person with knowledge (for instance, the purported author of a post or message), inspecting the device of the person who allegedly created the post or profile at issue to determine whether the device was used to create the profile or post, or obtaining information from the social media company that

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<sup>7</sup>At trial, the State had attempted to introduce evidence that was purportedly a printout from the MySpace page of the girlfriend of the defendant (whose nickname was allegedly “Boozy”) to demonstrate that the girlfriend had threatened a State’s witness. See Griffin, 419 Md. at 350, 19 A.3d at 419. The page contained language stating: “FREE BOOZY!!!! JUST REMEMBER SNITCHES GET STITCHES!! U KNOW WHO YOU ARE!!!” Id. at 350, 19 A.3d at 419. The State did not attempt to authenticate the page through the testimony of a witness with knowledge, *i.e.*, the girlfriend, but instead attempted to authenticate the printout through the testimony of an investigator. See id. at 348, 19 A.3d at 418. We determined that the printout was not sufficiently authenticated through circumstantial evidence under Maryland Rule 5-901(b)(4) because a photograph of the defendant’s girlfriend and information about her date of birth and the town in which she lived on the page were not “distinctive characteristics” that sufficiently indicated that the girlfriend created the profile or wrote the post that the State sought to introduce into evidence. Id. at 357, 19 A.3d at 424.

would connect the profile or post to the person who created it. See id. at 363-64, 19 A.3d at 427-28.

In a dissenting opinion joined by the Honorable Joseph F. Murphy, Jr., the Honorable Glenn T. Harrell, Jr. stated that he would have adopted the “reasonable juror” test used by United States Courts of Appeals for authentication of social media evidence because it was consistent with Maryland Rule 5-901. See id. at 366, 19 A.3d at 429 (Harrell, J., dissenting). Judge Harrell explained that, in his view, applying the reasonable juror test would have led to the conclusion that the social media evidence at issue was properly authenticated. See id. at 367, 19 A.3d at 429 (Harrell, J., dissenting).

Four years later, in Sublet, 442 Md. at 637-38, 113 A.3d at 697-98, we adopted the reasonable juror test for social media evidence and applied it in the three cases that were consolidated for purposes of the opinion: Sublet v. State, Harris v. State, and Monge-Martinez v. State. We explained that, in United States v. Vayner, 769 F.3d 125 (2d Cir. 2014), the Second Circuit had determined that Federal Rule of Evidence 901 “is satisfied if sufficient proof has been introduced so that a reasonable juror could find in favor of authenticity or identification.” Sublet, 442 Md. at 666, 113 A.3d at 715 (quoting Vayner, 769 F.3d at 129-30) (internal quotation marks omitted). In Sublet, id. at 638, 113 A.3d at 698, we held that social media evidence is authenticated under Maryland Rule 5-901 where a trial court determines that a reasonable juror could find that the evidence is what the proponent claims it to be.

Five years later, in Sample, 468 Md. at 567-68, 228 A.3d at 176, we concluded that the “reasonable juror” test is subject to the preponderance of the evidence standard, *i.e.*,

the more likely than not standard, and we reaffirmed that, under Maryland Rule 5-901(b)(4), social media evidence may be authenticated through circumstantial evidence. We stated that, with respect to the authentication of social media evidence through circumstantial evidence under Maryland Rule 5-901(b)(4), “the inquiry is context-specific,” and the presence or absence of certain information is not necessarily dispositive. Id. at 599, 228 A.3d at 195 (quoting Sublet, 442 Md. at 676-77, 113 A.3d at 721) (brackets omitted). We explained that the proponent of the evidence “need not rule out all possibilities that are inconsistent with authenticity, or prove beyond any doubt that the social media evidence is what it purports to be.” Id. at 599, 228 A.3d at 195 (quoting Sublet, 442 Md. at 666, 113 A.3d at 715) (brackets omitted).<sup>8</sup>

### **C. Authentication of Videos: Cole, Washington, Jackson, and Other Case Law**

We have previously addressed issues as to authentication of videos in three instances. See Cole, 342 Md. at 27, 672 A.2d at 1123; Washington, 406 Md. at 646, 961

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<sup>8</sup>In a civil case, Irwin Indus. Tool Co. v. Pifer, 478 Md. 645, 651, 674-75, 276 A.3d 533, 536, 550 (2022), we applied the “reasonable juror” test and concluded that establishing a chain of custody was not a requirement for authentication of the evidence at issue. We held that containers purchased on eBay were properly authenticated through circumstantial evidence under Maryland Rule 5-901(b)(4) because “a reasonable juror [could] find by a preponderance of the evidence that the powder within the containers was Strait-Line marking chalk.” Id. at 651, 678-79, 276 A.3d at 536, 552-53. We addressed the possibility of tampering as follows:

Insofar as negating the possibility of tampering is concerned, there is no hard and fast requirement that in a civil case where the issue of tampering is raised or where a substance may be susceptible to tampering, the proponent of the offered evidence is required to establish a chain of custody for the evidence to be admissible.

Id. at 678, 276 A.3d at 552.

A.2d at 1112; Jackson, 460 Md. at 119, 188 A.3d at 982. In Cole, 342 Md. at 26-27, 672 A.2d at 1122-23, as a matter of first impression, we held that the “silent witness” theory of authentication can apply to videos and affirmed the admission of a video under that theory. In Cole, id. at 18, 672 A.2d at 1118, a correctional officer’s employment had been terminated because the officer deliberately injured an inmate while extracting him from a cell. The incident was videotaped. See id. at 18, 672 A.2d at 1118. At a hearing before an administrative law judge (“the ALJ”), the warden testified that it was the regular practice of the prison for extractions of inmates from cells to be recorded by video. See id. at 18, 672 A.2d at 1118. The warden explained that each such videotape was “routinely labelled with the date and time of the extraction and the names of the inmate and officers involved[,]” was “kept in an individual envelope[,] and [was] stored in a security vault at the institution[,] where they [could] be viewed only by signing in and out on a chain of custody form.” Id. at 27, 672 A.2d at 1122. Over objection, the ALJ admitted into evidence the videotape of the correctional officer injuring the inmate. See id. at 19, 672 A.2d at 1118. No witness with knowledge testified that the content of the video fairly and accurately depicted the events shown on it. See id. at 17, 672 A.2d at 1118.

We explained that the “pictorial testimony” theory of authentication, in which a witness with knowledge of the events depicted on the video provides testimony, is not the sole method of authenticating video evidence. See id. at 21, 672 A.2d at 1119. We held that, like a photograph, a video can be authenticated under the “silent witness” theory of authentication. See id. at 26, 672 A.2d at 1122. We described the “silent witness” theory as an alternative way to authenticate video evidence under which a witness with personal

knowledge of the content of the video is not required. Id. at 21, 672 A.2d at 1119. We refrained from setting forth rigid prerequisites for the foundation necessary to authenticate under the “silent witness” theory, explaining that “[t]he facts and circumstances surrounding the making of the photographic evidence and its intended use at trial will vary greatly from case to case, and the trial judge must be given some discretion in determining what is an adequate foundation.” Id. at 26, 672 A.2d at 1122 (citation omitted). We concluded that the videotape at issue was sufficiently authenticated under the “silent witness” theory based on the warden’s testimony and that the ALJ properly admitted it into evidence. See id. at 27, 672 A.2d at 1123.<sup>9</sup>

In Washington, 406 Md. at 644-46, 961 A.2d at 1111-12, where the defendant was charged with shooting a person outside of a bar and an unknown technician (who had been hired by the owner of the bar) compiled a CD from multiple surveillance cameras and transferred information from the CD to a VHS tape which was given to the police, we held that the trial court erred in admitting the video and that the error was not harmless beyond a reasonable doubt. The Appellate Court had concluded that the trial court abused its discretion in admitting the videotape because the State failed to properly authenticate the tape but that the error was harmless. See id. at 648-49, 961 A.2d at 1113-14.<sup>10</sup> In reviewing

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<sup>9</sup>We also concluded that authentication as a business record was an independent basis for authenticating the videotape because “there was enough evidence elicited at the administrative hearing to conclude that a record was made and kept in the course of the correctional institution’s regularly conducted business and that the videotape was made and kept as a valuable part of that record.” Cole, 342 Md. at 30, 672 A.2d at 1124.

<sup>10</sup>We granted *certiorari* with respect to three questions, the third of which was:

the issue of harmless error, we discussed in detail how the “silent witness” and “pictorial testimony” methods of authentication may be used to authenticate photographs and videos. See id. at 652-55, 961 A.2d at 1115-17. Citing Cole, 342 Md. at 20, 672 A.2d at 1119, we explained that “[a] videotape is considered a photograph for admissibility purposes. It is admissible in evidence and is subject to the same general rules of admissibility as a photograph.” Washington, 406 Md. at 651, 961 A.2d at 1115. We stated that the Appellate Court had succinctly set out the rules for admission of photographs and quoted the following passage of the Appellate Court’s opinion:

“Photographs may be admissible under one of two distinct rules. Typically, photographs are admissible to illustrate testimony of a witness when that witness testifies from first-hand knowledge that the photograph fairly and accurately represents the scene or object it purports to depict as it existed at the relevant time. There is a second, alternative method of authenticating photographs that does not require first-hand knowledge. The ‘silent witness’ theory of admissibility authenticates ‘a photograph as a ‘mute’ or ‘silent’ independent photographic witness because the photograph speaks with its own probative effect.”

Id. at 652, 961 A.2d at 1115 (quoting Washington v. State, 179 Md. App. 32, 44, 943 A.2d 704, 711 (2008)). After quoting the Appellate Court, we observed that both the “pictorial

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Did the [Appellate Court of Maryland] err when it held that the introduction of an improperly authenticated surveillance videotape and photographs was harmless error, where the videotape and the photographs purportedly placed the petitioner at the scene of the crime, where they purportedly showed the petitioner committing the crime and where the prosecutor, in opening and closing arguments, repeatedly referred to, and relied on, those exhibits to argue that the petitioner was not guilty?

Because we reversed the judgment of the Appellate Court on this question, we did not address the first two questions, which did not involve authentication of the videotape and are not relevant to our discussion in this case.

testimony” theory and the “silent witness” method of authentication allow photographic evidence to be authenticated. Id. at 652, 961 A.2d at 1116. We reiterated that, “to satisfy the evidentiary requirement for authentication, the proponent of the evidence must show that the evidence is ‘sufficient to support a finding that the matter in question is what its proponent claims.’” Id. at 651, 961 A.2d at 1115 (quoting Md. R. 5-901(a)).

Before addressing the issue of harmless error, we held “that the trial court erred in admitting the videotape and still photographs without first requiring an adequate foundation to support a finding that the matter in question [was] what the State claimed it to be” Id. at 655-56, 961 A.2d at 1118. We did not issue a holding with respect to the applicability of either the “pictorial testimony” or “silent witness” method of authentication. In assessing whether the improper admission of the videotape constituted harmless error, we concluded that, without the videotape, the State’s identification of the petitioner as the shooter depended primarily on the testimony of “a witness who had declined on several occasions pretrial to identify petitioner as the shooter[,]” and that admission of “the videotape, relied upon so heavily by the State, under these circumstances, was not harmless beyond a reasonable doubt.” Id. at 658, 961 A.2d at 1119.

In Jackson, 460 Md. at 119, 188 A.3d at 982, we held that a surveillance video “was properly authenticated” and “serve[d] as a silent witness of the continuous activity at [an] ATM” during the twenty-minute period that it showed. After an alleged home invasion robbery, over the course of several hours, the defendant purportedly used a debit card to make unauthorized withdrawals at an ATM at a branch of Bank of America. See id. at



111, 188 A.3d at 977. The trial court admitted into evidence two CDs, each with a surveillance video of the ATM—one from a twenty-minute period on the night of the robbery, and one from a twenty-minute period in the early morning hours on the following date. See id. at 112, 188 A.3d at 978. The trial court also admitted into evidence two still images from surveillance videos. See id. at 112, 188 A.3d at 978. Only the surveillance video from the twenty-minute period on the night of the robbery was at issue before us—*i.e.*, in this Court, the defendant did not contend that the other surveillance video or the still images were not properly authenticated. See id. at 112 n.4, 114, 188 A.3d at 978 n.4, 979.

The surveillance video at issue was recorded by four cameras, each showing the ATM from a different angle. See id. at 118, 188 A.3d at 982. A protective services manager from Bank of America testified that he accessed a digital video recording (“DVR”) program and pulled up surveillance videos from the relevant dates, times, and cameras. Id. at 117, 188 A.3d at 981. The manager testified that the surveillance video at issue was among the ones that he watched when he accessed the DVR program. See id. at 118-19, 188 A.3d at 982. The manager testified that, after accessing the DVR program and pulling up surveillance videos, he exported them to a digital file, which he emailed to a detective. See id. at 117, 188 A.3d at 981. The manager testified that he could not “modify, cut, paste, or enhance the video in any way[,]” and he “did not even have the ability to copy the file directly to another storage device, such as a thumb drive or DVD.” Id. at 117, 188 A.3d at 981 (emphasis omitted).

Based on the manager’s detailed testimony, we affirmed the trial court’s admission of the surveillance video, as the video was properly authenticated. See id. at 119, 129, 188

A.3d at 982, 988. We noted that we had “previously explained that, for purposes of admissibility, a videotape is subject to the same authentication requirements as a photograph.” Id. at 116, 188 A.3d at 980 (citing Washington, 406 Md. at 651, 961 A.2d at 1115). Quoting Washington, 406 Md. at 652, 961 A.2d at 1116, we stated that, ““so long as sufficient foundational evidence is presented to show the circumstances under which it was taken and the reliability of the reproduction process,”” a photograph is admissible as evidence. Jackson, 460 Md. at 116-17, 188 A.3d at 981. We reiterated that “[t]he question of authenticity is whether the evidence ‘is what the proponent claims it to be[,]’” and concluded that the video surveillance footage was properly authenticated. Id. at 118-19, 188 A.3d at 982 (quoting Md. R. 5-901(a)).

Like this Court, the Appellate Court of Maryland has addressed issues concerning the authentication of videos and affirmed the admission of videos under the “silent witness” method of authentication. In Reyes v. State, 257 Md. App. 596, 612 & n.6, 629, 292 A.3d 416, 425 & n.6, 435 (2023), the Appellate Court of Maryland held that the trial court did not abuse its discretion in admitting a video and still images recorded by a home security camera called a Nest camera manufactured and sold by Google. Reyes, id. at 609, 292 A.3d at 423, involved a nonfatal shooting that took place near a residential area. At trial, a witness who lived in the area of the shooting testified that he had installed a home security camera “in the front window of his house” and explained “that it was Wi-Fi-enabled and motion-activated, and sends an alert to his phone when it begins and ends recording.” Id. at 609, 612, 292 A.3d at 423, 425. According to the witness, around the time of the

shooting, he received an alert on his phone that the home security camera had begun recording. See id. at 609, 292 A.3d at 423. The witness testified that he reviewed the resulting video, which showed the shooting, and emailed the video to law enforcement. See id. at 609, 612, 292 A.3d at 423, 425. The witness testified that the State’s exhibit containing the video was the same as the video that he emailed to law enforcement and that it “accurately depicted the conditions on the night of the shooting[s.]” Id. at 612, 292 A.3d at 425. The victim also testified that still images from the video accurately depicted the scene on the night of the shooting. See id. at 613, 292 A.3d at 425. Over objection, the trial court admitted the video and still images into evidence. See id. at 613, 292 A.3d at 425.

The Appellate Court concluded that the witness’s testimony about the video “provided an ‘adequate foundation assuring the accuracy of the process producing [the video and still images],’ and as such, the evidence was properly ‘received as a so-called silent witness.’” Id. at 631-32, 292 A.3d at 436-37 (quoting Washington, 406 Md. at 653, 961 A.2d at 1116) (brackets omitted). The Appellate Court observed that, because it held that the still images were properly authenticated through the witness’s testimony under the “silent witness” theory of authentication, it was not necessary to address the State’s alternative argument that the still images could be authenticated through the victim’s testimony under the “pictorial testimony” theory of authentication. See id. at 632 n.21, 292 A.3d at 437 n.21. The Appellate Court explained that “all photographic evidence, including video evidence, may be authenticated under several theories, including the ‘pictorial testimony’ theory and the ‘silent witness’ theory[.]” Id. at 630, 292 A.3d at 435

(citations omitted).<sup>11</sup>

#### **D. Case Law From Other Jurisdictions**

Courts in other jurisdictions have concluded that video footage was sufficiently authenticated through circumstantial evidence, and, in some instances, courts have explained that video footage may be authenticated by various forms of evidence. In Commonwealth v. Davis, 168 N.E.3d 294, 311 (Mass. 2021), the Supreme Judicial Court of Massachusetts held that “circumstantial evidence was sufficient to enable a reasonable jury to find that [a] video was what it purported to be.” A law enforcement officer testified that, after responding to the scene of a shooting, he saw a car with its driver’s side door open that had crashed into a pole. See id. at 298-99, 311. While canvassing the area for witnesses and cameras, the officer saw a camera affixed to a residence. See id. at 299. The officer testified that a person who lived at the residence allowed him to view on a computer a video recorded by the camera. See id. According to the officer, because the person did not know how to download the video or copy it to another device, the officer used his cell phone to record the video. See id. The defendant challenged only the authenticity of the video contained on the computer, not the authenticity of the video recorded by the officer’s cell phone. See id. at 310 & n.22. Over objection, the trial court admitted into evidence the video the officer had recorded on his cell phone, *i.e.*, the officer’s recording of the

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<sup>11</sup>Additional reported opinions in which the Appellate Court has held that videos were properly authenticated under the “silent witness” method include Covel v. State, 258 Md. App. 308, 324, 297 A.3d 1228, 1238, cert. denied, 486 Md. 157, 303 A.3d 969 (2023) and Prince v. State, 255 Md. App. 640, 652-54, 284 A.3d 795, 802 (2022), cert. denied, 482 Md. 746, 290 A.3d 608 (2023).

surveillance video from the computer. See id. at 310.

The Supreme Judicial Court of Massachusetts held that the trial court did not abuse its discretion in admitting the surveillance video into evidence. See id. at 311. The Court observed that a vehicle depicted in the video that had crashed into the pole was the same color and body style as a vehicle in photographs taken at the crime scene that the officer had testified were fair and accurate representations of the scene of the shooting. See id. The Court also noted that the video and one of the photographs of the scene both depicted the same sign advertising a church in front of the car. See id. The Court concluded that the circumstance that the officer viewed the surveillance video “in the immediate aftermath of the shooting[s], after he personally approached the resident to whom the surveillance system belonged[,] mitigate[d] concerns that the video could have been manipulated.” Id. (citation omitted). In addition, the Court determined that another witness’s testimony about events that she observed at the scene matched information in the video and “provide[d] further circumstantial evidence to authenticate the video.” Id. The Court explained that the “silent witness” and “pictorial testimony” methods are not “the exclusive ways that a video can be authenticated” and that evidence can be authenticated by circumstantial evidence alone. Id. at 310-11.<sup>12</sup>

Davis is not the only case in which a court in another jurisdiction has held that a video was authenticated through circumstantial evidence. In Holley v. State, 871 S.E.2d

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<sup>12</sup>Despite finding no abuse of discretion in the admission of the video, the Court reversed on the ground that the trial court abused its discretion in admitting evidence related to a GPS device. Davis, 168 N.E.3d at 298-99.

13, 18-19 (Ga. Ct. App. 2022), the Court of Appeals of Georgia concluded, under a statute providing for authentication through “testimony of a witness with knowledge that a matter is what it is claimed to be[,]” that there was “ample circumstantial evidence . . . to authenticate [a] video” that the defendant allegedly posted on her Facebook page. (Cleaned up). In Lamb v. State, 246 So. 3d 400, 408-10 (Fla. Dist. Ct. App. 2018), the District Court of Appeal of Florida, Fourth District, held that a video that one of the codefendants allegedly posted on Facebook was properly authenticated because of its “distinctive characteristics and content, in conjunction with circumstantial evidence[.]” In Fowler v. State, 544 S.W.3d 844, 848-50 (Tex. Crim. App. 2018), the Court of Criminal Appeals of Texas concluded that “circumstantial evidence [] authenticate[d]” a surveillance video from a store, including the circumstance that the video showed the defendant at the store at the date and time identified on a receipt found near a vehicle that the defendant allegedly stole.

### **E. The Applicable Standard in this Case**

We have not previously addressed whether a video can be authenticated through circumstantial evidence under Maryland Rule 5-901(b)(4) or whether the “reasonable juror” test applies to authentication of video evidence—*i.e.*, these are matters of first impression. We now unequivocally hold that the “reasonable juror” test applies to authentication of videos, just as it does to authentication of social media evidence and other evidence. See Sublet, 442 Md. at 638, 113 A.3d at 698; Sample, 468 Md. at 568, 228 A.3d at 176. We conclude that, for a trial court to admit a video, there must be sufficient evidence for a reasonable juror to find by a preponderance of the evidence that the video is

authentic. We also hold that a video can be authenticated through circumstantial evidence under Maryland Rule 5-901(b)(4). We agree with the Supreme Judicial Court of Massachusetts that what we have called the “pictorial testimony” and “silent witness” theories of authentication are not “the exclusive ways a video can be authenticated[.]” Davis, 168 N.E.3d at 310-11. Video footage can be authenticated under several theories,<sup>13</sup> including through circumstantial evidence under Maryland Rule 5-901(b)(4).

We have never held that the “pictorial testimony” and “silent witness” theories of authentication—or the “business record” theory, for that matter—are the only ways to authenticate a video, or that a video cannot be authenticated through other means. Such reasoning would be at odds with the principle that, without exception, Maryland Rule 5-901(b)(4) permits a proponent of evidence to authenticate it through circumstantial evidence, and with our holdings in Sample, Sublet, and Griffin, which applied Maryland Rule 5-901(b)(4) to the authentication of social media evidence. See Sample, 468 Md. at 565, 228 A.3d at 174; Sublet, 442 Md. at 677, 113 A.3d at 721; Griffin, 419 Md. at 357, 19 A.3d at 423-24. As with social media evidence, Maryland Rule 5-901(b)(4) applies to the admission of video footage, and the question that we must answer in reviewing a trial court’s ruling is whether there was sufficient evidence for a reasonable juror to find by a preponderance of evidence that the video is what it is claimed to be.

Our discussion of the “silent witness” and the “pictorial testimony” theories in

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<sup>13</sup>As demonstrated in Cole, 342 Md. at 27, 30, 672 A.2d at 1123, 1124, in which we concluded that the video at issue could be authenticated as a business record as well as under the “silent witness” theory, the “pictorial testimony” and “silent witness” theories of authentication are not the only ways to authenticate a video.

Washington, 406 Md. at 652-55, 961 A.2d at 1115-17, does not stand for the proposition that they are the exclusive methods for authentication of video footage. Our holding in Washington, id. at 655-56, 658, 961 A.2d at 1117-18, 1119, was that the video at issue was not properly authenticated because the State failed to demonstrate that the video was what it purported to be and that the trial court's improper admission of the video was not harmless error. Although we quoted the Appellate Court's discussion of the "pictorial testimony" and the "silent witness" theories, we expressed no view one way or the other as to whether we interpreted the Appellate Court's discussion to mean that there are only two methods for authentication of video evidence. See id. at 652, 961 A.2d at 1115. And, to the extent that the language in the Appellate Court's opinion originated from our decision in Cole, nothing in Cole indicated that there are two exclusive methods for authentication of video evidence. In Cole, 342 Md. at 26-28, 672 A.2d at 1122-23, we adopted the "silent witness" method and determined that the surveillance video at issue could also have been authenticated as a business record.

In addition, unlike in this case, in Washington, the State did not contend that the video was properly authenticated through circumstantial evidence. We did not even mention Maryland Rule 5-901(b)(4) in Washington, much less decline to apply it. In short, Washington does not in any way preclude authentication of a video through means other than the "silent witness" and "pictorial testimony" theories of authentication, including through use of circumstantial evidence.

Video footage can be authenticated in different ways under the rules governing authentication, including through the testimony of a witness with knowledge under



Maryland Rule 5-901(b)(1), circumstantial evidence under Maryland Rule 5-901(b)(4), or a combination of both, as is the circumstance in this case. There need not be a witness with personal knowledge of every single event depicted in a video for the video to be authenticated. What matters is that the proponent of the video must demonstrate that the evidence is sufficient for a reasonable juror to find by a preponderance of the evidence that the video is what it is claimed to be.

#### **F. The State Met Its Burden to Prove That the Video Was Authentic**

In this case, we conclude that the circuit court did not abuse its discretion in admitting the video at issue because it was properly authenticated through a combination of the testimony of a witness with knowledge under Maryland Rule 5-901(b)(1) and circumstantial evidence under Maryland Rule 5-901(b)(4). A reasonable juror could have found by a preponderance of the evidence that the video was what it purported to be—namely, a fair and accurate video of the shooting and the events surrounding it.

The parts of the video showing the events that Mr. Zimmerman saw were properly authenticated under Maryland Rule 5-901(b)(1) through his testimony as a witness with knowledge. Before the video was admitted into evidence, based on his firsthand knowledge, Mr. Zimmerman testified that the video showed him sitting in his vehicle on what he knew to be the 3900 block of Falls Road, that the video was a true and accurate depiction of the events on the night of the shooting, and that there did not seem to have been any alterations or edits to the video. Mr. Zimmerman testified about the following facts that he had personal knowledge of and that were depicted in the video:

- While Mr. Zimmerman was sitting in his vehicle, Mr. Mooney walked down the

street toward him on his right.

- The area had lights, and nothing obstructed Mr. Zimmerman's view of Mr. Mooney, who was not wearing a face mask.
- At some point, Mr. Mooney slowed down.
- Mr. Mooney kept walking until he passed where Mr. Zimmerman was sitting in the vehicle.
- Mr. Zimmerman opened the door of his vehicle next to the driver's seat to look for Mr. Mooney.
- As soon as Mr. Zimmerman sat back in the driver's seat, he was shot.

To be sure, Mr. Zimmerman did not testify that he saw the shooting, and he lacked firsthand knowledge of who the shooter was. Even so, the part of the video depicting the shooting was properly authenticated through circumstantial evidence under Maryland Rule 5-901(b)(4), as there was sufficient circumstantial evidence from which a reasonable juror could have inferred that the video fairly and accurately showed the shooting. The close temporal proximity of the shooting to the events before and after the shooting of which Mr. Zimmerman had personal knowledge gave rise to an inference that the video accurately depicted the shooting. Mr. Zimmerman testified that the video was a true and accurate depiction of the events that occurred and that the video did not appear to have been edited or altered. And, there was evidence of the nature and origin of the video, indicating that the video was obtained from the crime scene from a source not connected to law enforcement or the shooting, as Detective Liu testified that he obtained the video from an individual with a camera mounted on the exterior wall of his residence near the crime scene.

With respect to the immediacy of the events, the entire video was short, lasting only 1 minute and 51 seconds. The part of the video showing the shooting and the events that occurred before and after is even briefer. The shooting occurred within mere seconds in a series of events depicted on the video that Mr. Zimmerman had firsthand knowledge of. In other words, Mr. Zimmerman could verify the accuracy of numerous events depicted in the video that occurred mere seconds before and after the shooting. Mr. Zimmerman had personal knowledge of Mr. Mooney walking by his vehicle and Mr. Mooney slowing down, and of himself opening the door of his vehicle next to the driver's seat and being shot immediately thereafter.

The temporal proximity of relevant events can be significant where evidence is authenticated through circumstantial evidence under Maryland Rule 5-901(b)(4). In Sample, 468 Md. at 567-68, 228 A.3d at 176, we determined that “the temporal proximity of the attempted armed robbery to the unfriending” was one of the circumstances that authenticated social media evidence indicating that the defendant unfriended his accomplice after the offense. In Sublet, 442 Md. at 676, 113 A.3d at 721, we concluded that a reasonable juror could have found that tweets were authentic, in part, because of “the temporal proximity” between the tweets and direct messages that had already been authenticated. Similarly, in this case, the temporal proximity of the shooting to the events before and after that were depicted on the video and that Mr. Zimmerman had personal knowledge of gives rise to a reasonable inference that the video more likely than not fairly and accurately showed the shooting.

Mr. Zimmerman testified that he reviewed the video in preparation for trial and that

the video truthfully and accurately depicted the events that occurred and did not appear to have been edited or altered.<sup>14</sup> Because Mr. Zimmerman had personal knowledge of events that occurred within seconds before and after the shooting and testified that the video accurately depicted those events, a reasonable inference can be drawn that the video also fairly and accurately depicted the shooting.<sup>15</sup> And, although the burden was on the State to authenticate the video, it is worth observing that, while Mr. Mooney's counsel argued in the circuit court that "there's no way to know if that video's been altered[,]" Mr. Mooney did not allege that the video was altered or tampered with.

Another important circumstance supporting the conclusion that a reasonable juror could have found that the video fairly and accurately depicted the shooting involves the nature and origin of the video. Detective Liu testified that, when officers arrive at a crime scene, the first thing they do is look for witnesses and cameras, and that he obtained the video from an individual with a camera mounted on the exterior wall of his residence. Although the record does not reveal the identity of the individual who provided the video to Detective Liu, there was sufficient evidence to infer that the video was recorded by a camera belonging to a local resident and that it was obtained the same night as the shooting.

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<sup>14</sup>Mr. Zimmerman's testimony that the video did not appear to be altered or edited constituted testimony that the content of the video did not vary or contradict his observations of the events that occurred. Although Mr. Zimmerman's testimony did not verify the manner of production of the video and was not the equivalent of testimony required for authentication of a video under the "silent witness" theory, Mr. Zimmerman's testimony confirmed that the events shown on the video truthfully and accurately depicted his observations of what occurred.

<sup>15</sup>After the video was played, consistent with his testimony that he had watched the video and it accurately depicted the events that occurred, Mr. Zimmerman confirmed that the video showed him running to McDonald's after the shooting.

That the video was recovered the night of the shooting from a source not connected to either Mr. Zimmerman or Mr. Mooney, or the police, supports the conclusion that there was sufficient circumstantial evidence for a reasonable juror to find by a preponderance of the evidence that the video was what it was claimed to be—a fair and accurate depiction of the shooting.

While there was sufficient evidence for a reasonable juror to find in favor of authentication in this case, authentication of video footage through circumstantial evidence under Maryland Rule 5-901(b)(4) will generally require more fulsome questioning than the type of inquiry typically used to establish the necessary foundation for authentication under Maryland Rule 5-901(b)(1), where a witness may be asked if the item is a fair and accurate depiction of what it purports to be. To be sure, in this case, the prosecutor asked Mr. Zimmerman whether the video showed what he knew to be the 3900 block of Falls Road and confirmed with Mr. Zimmerman that the video showed him in his vehicle. And, after a bench conference at which the circuit court questioned whether a proper foundation had been laid for admission of the video, the prosecutor asked Mr. Zimmerman if he had watched the video and if the video was a true and accurate depiction of the events that occurred on the night of the shooting. Although these were certainly valid questions and are the type of questions typically associated with authenticating evidence under Maryland Rule 5-901(b)(1), authentication of video footage through circumstantial evidence will generally require more specific questioning tailored to the particular circumstances of the case to establish a sufficient foundation for admission of evidence under Maryland Rule 5-901(b)(4).

In this case, given the extremely close temporal proximity of the shooting to the events before and after the shooting (of which Mr. Zimmerman had personal knowledge), Mr. Zimmerman's testimony that the video was a true and accurate depiction of the events that occurred, and the nature and origin of the video, the absence of more specific questioning, generating additional circumstantial evidence to corroborate events in the video, does not detract from our ability to conclude that the video was properly authenticated.

### **G. Conclusion**

Video footage, like social media evidence, is susceptible to alteration, and the increased availability of new technology, particularly the advent of image-generating artificial intelligence, may present unique challenges in authenticating videos and photographs. As we have noted, “[p]hotographic manipulation, alterations and fabrications are nothing new, nor are such changes unique to digital imaging, although it might be easier in this digital age.” Washington, 406 Md. at 651, 961 A.2d at 1115. Nonetheless, at this time, video footage can be authenticated through vigilant application of existing methods for authentication of evidence. Like other evidence, video footage can be authenticated by circumstantial evidence sufficient for a reasonable juror to find by a preponderance of the evidence that the video is what it purports to be. As with social media evidence, the proponent of the evidence “need not rule out all possibilities that are inconsistent with authenticity, or prove beyond any doubt that the [] evidence is what it purports to be.” Sample, 468 Md. at 599, 228 A.3d at 195 (quoting Sublet, 442 Md. at 666, 113 A.3d at 715) (brackets omitted). What matters is that there is sufficient evidence for a reasonable

juror to find that more likely than not the video footage is what it is claimed to be. Because that test was met here, we affirm the judgment of the Appellate Court.

**JUDGMENT OF THE APPELLATE COURT OF  
MARYLAND AFFIRMED. PETITIONER TO  
PAY COSTS.**

Circuit Court for Baltimore City  
Case No. 121280030

Argued: June 3, 2024

IN THE SUPREME COURT

OF MARYLAND

No. 32

September Term, 2023

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CHRISTOPHER MOONEY

v.

STATE OF MARYLAND

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Fader, C.J.  
Watts  
Booth  
Biran  
Gould  
Eaves  
Hotten, Michele D. (Senior  
Justice, Specially Assigned),

JJ.

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Concurring Opinion by Fader, C.J.

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Filed: August 13, 2024



I join the Majority opinion in full. I write separately to express one additional thought. Justice Gould begins his thoughtful dissent with a reference to “the age of artificial intelligence” and the growing “risk of fabricated or altered evidence.” The evidentiary concerns associated with the growth and proliferation of artificial intelligence, especially generative artificial intelligence, are real and pressing. Courts should be alert to claims that evidence has been altered by the use of artificial intelligence, and artificial intelligence technology may ultimately require us to adjust our rules and procedures for authenticating electronic evidence. But the record in this case does not contain any hint that artificial intelligence may have played a role, nor was there any suggestion that the video may have been altered in any way. We can expect to need to tackle issues associated with artificial intelligence soon, but this is not the case.

Circuit Court for Baltimore City  
Case No. 121280030  
Argued: June 3, 2024

IN THE SUPREME COURT  
OF MARYLAND

No. 32

September Term, 2023

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CHRISTOPHER MOONEY

v.

STATE OF MARYLAND

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Fader, C.J.  
Watts  
Booth  
Biran  
Gould  
Eaves  
Hotten, Michele D. (Senior  
Justice, Specially Assigned),

JJ.

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Dissenting Opinion by Gould, J.

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Filed: August 13, 2024

I respectfully dissent to the Majority's well-written and thorough opinion. In the age of artificial intelligence, the risk of fabricated or altered evidence has never been greater, and that risk will only increase as technology advances. The Majority optimistically posits that "at this time, video footage can be authenticated through vigilant application of existing methods for authentication of evidence." Maj. Op. at 36. I hope so, but my concerns are that Maryland Rule 5-901 was *not* vigilantly applied here, when the trial court admitted the video into evidence over Mr. Mooney's objection and that, as a result, the Majority is lowering the bar by affirming the trial court's ruling. In my view, the trial court should not have admitted the entire video but instead should have required the State to edit out the parts where Mr. Zimmerman lacked personal knowledge, including the footage of the shooting. Those critical few seconds were not authenticated by the pictorial testimony method, the silent witness method, or with circumstantial evidence. I write separately to explain my reasoning.

Before delving into my analysis, I must emphasize that this dissent does not and should not be interpreted as calling into question the integrity of the officers, detectives, attorneys, or anyone else who may have touched the video exhibit at issue here. I have no reason to believe—and thus I do not believe—that the video was altered in any respect. But that is irrelevant to the legal issue before us. The relevant issue is whether the State satisfied its burden in establishing the authenticity of the video, based on the record evidence. Thus, any hypothetical speculation that the video has been fabricated or altered is solely to demonstrate what I believe are the weaknesses in the Majority's reasoning, not to suggest that there is any reason to believe such foul play occurred here.

### *The Pictorial Testimony Method*

At trial, the State relied solely on the “pictorial testimony” method of authentication. *See Mooney v. State*, No. 1561, Sept. Term, 2022, 2023 WL 6783388, at \*9 n.3 (Md. App. Ct. Oct. 13, 2023). Under that method, a video may be authenticated if a witness with firsthand knowledge of events testifies that the video fairly and accurately depicts those events. *See Dep’t of Pub. Safety and Corr. Servs. v. Cole*, 342 Md. 12, 20-21 (1996); *see also* Maj. Op. at 2. That the pictorial testimony method was used is evident in the bench conference following the defense’s objection to the video’s admission, during which the court and the State discussed how to lay a proper foundation for authenticating the video:

[MR. MOONEY’S COUNSEL]: I mean, there’s no way to know if that video’s been altered. It’s somebody else’s Ring camera. These aren’t still photographs of what happened.

THE COURT: Has he watched it?

[MR. MOONEY’S COUNSEL]: I mean --

THE COURT: I don’t think that’s necessarily --

[MR. MOONEY’S COUNSEL]: And that was other --

THE COURT: -- a difference between still photographs and, um, video. If he’s able to authenticate it, he’s able to authenticate it, but I don’t.

[MR. MOONEY’S COUNSEL]: Right. But I don’t know that he watched the whole thing either --

THE COURT: I don’t know either.

[MR. MOONEY’S COUNSEL]: -- which is what I wanted to voir dire him on.

THE COURT: Yeah.

[PROSECUTOR]: He has watched it in view, in preparation of this trial, he has --

THE COURT: Well, you -- you can ask him all that before, you haven't laid the appropriate foundation for it yet. I don't know if that video --

[PROSECUTOR]: He's authenticated it as to be the date and the time of the incident, it was a true and accurate reflection of that date and time.

THE COURT: There are other questions you need to ask him, like, has he watched it.

[PROSECUTOR]: Okay.

THE COURT: And is it a fair and accurate representation of what happened. I mean, I'm not trying --

[PROSECUTOR]: Okay.

THE COURT: Ask some more foundational questions.

[PROSECUTOR]: Sure.

After the bench conference, the State questioned Mr. Zimmerman in the manner suggested by the court and the court admitted the video:

[PROSECUTOR]: Did you watch this video in preparation?

[MR. ZIMMERMAN]: Yes, I did.

[PROSECUTOR]: Okay. And after seeing that video[,] was that a true and accurate depiction of the events that occurred that day?

[MR. ZIMMERMAN]: Yes.

[PROSECUTOR]: And there was nothing that was changed or altered?

[MR. ZIMMERMAN]: No.

[PROSECUTOR]: From your recollection thereof?

[MR. ZIMMERMAN]: No.

[PROSECUTOR]: Your Honor, the State at this time would move into evidence State's Exhibit 1A.

THE COURT: Over objection, State's 1A is admitted.

The problem here is that Mr. Zimmerman did not see Mr. Mooney after he walked past Mr. Zimmerman's car. Mr. Zimmerman testified that as Mr. Mooney was walking past his car, he thought Mr. Mooney was about to say something because "it looked like he slowed down, like he was about to say something." Mr. Zimmerman explained that:

. . . I seen him walk, and I didn't know which way he went and so I'm looking. And then, I'm thinking he's going to come run up to my front side of my -- my passen -- or the drive's seat. . . . And, um, I look out my, I cracked my door and I'm looking out and I didn't see him. As soon as I sat back that's when the gunshots happened.

Mr. Zimmerman gave his account of the incident *before* the State sought to authenticate the video—that is *before* Mr. Zimmerman answered "yes" when the State asked him if the video was "a true and accurate depiction of the events that occurred that day." By his admission, therefore, Mr. Zimmerman's first-hand knowledge of the events did *not* include the shooting. A reasonable juror would have had no basis to conclude from Mr. Zimmerman's testimony that the depiction of the shooting was true, accurate, and unaltered. Thus, that part of the video should have been edited out of the version presented to the jury.

### *Circumstantial Evidence*

The Majority concludes that the footage depicting the shooting was authenticated by circumstantial evidence. One such piece of circumstantial evidence, according to the Majority, is the “close temporal proximity” of the relevant events. Maj. Op. at 31-33. “Temporal proximity” refers to the amount of time between two or more events. Under the Majority’s use of “temporal proximity,” the relevant events are (1) the moments depicted in the video leading up to the shooting, (2) the shooting, and (3) the moments after the shooting. Mr. Zimmerman had personal knowledge of the first and third events, but not the second.<sup>1</sup> The Majority reasons that because the video is short and because the second event, which lasted just a few seconds, was sandwiched between the first and third events, a reasonable juror could infer that the “video fairly and accurately showed” the second event, even though Mr. Zimmerman did not see it. Maj. Op. at 32-33. Put another way: According to the Majority, Mr. Zimmerman’s ability to authenticate *some* of the video provides a basis on which a reasonable juror could conclude that another part of the video was neither fabricated nor altered. I disagree with the Majority’s reasoning.

The authentication requirement exists to prevent the admission of tampered evidence. If someone wanted to frame Mr. Mooney by tampering with the video, we would *expect* that person to alter the minimum amount necessary to achieve that purpose. Here, that could be altering only the appearance of the shooter. So, the fact that Mr. Zimmerman can authenticate the parts he *did* see does not mean the parts he could *not* see were

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<sup>1</sup> As to the third event, Mr. Zimmerman’s personal knowledge was limited as well, as he did not testify that he saw the shooter leave the scene.

untampered with.

The Majority relies on two cases for its temporal proximity analysis: *Sublet v. State*, 442 Md. 632 (2015) and *State v. Sample*, 468 Md. 560 (2020). If the Majority's reliance on these cases is limited to the proposition that temporal proximity can theoretically provide circumstantial evidence of authenticity in certain contexts—that is, to establish that the concept of temporal proximity is potentially relevant in an authentication analysis—I do not disagree. But if the Majority relies on *Sublet* and *Sample* as precedents to justify *how* it uses temporal proximity here, I disagree. The nature of and relevance of the evidence at issue in both cases were different than that of the video at issue here. So too are the authentication challenges raised in the respective cases.

In *Sublet*, this Court decided three cases consolidated for appeal. 442 Md. at 636-37. The second case, *Harris v. State*, involved private messages and public tweets on X (formerly Twitter). *Id.* at 645-52. The State apparently believed that the content of those communications was evidence of the defendant's guilt; that is, what the defendant said in those communications was inculpatory. *See id.* at 645-52, 674-76. But the State had to establish that the communications were the handiwork of the defendant. It was in that context that temporal proximity came into play: The timing of the communications relative to other events connecting the defendant to the alleged crime was circumstantial evidence of the defendant's authorship. *Id.* at 674-76.

In *Sample*, the social media action was the unfriending on Facebook by one person—the defendant—of the defendant's alleged accomplice. 468 Md. at 565-68. The State asserted that this act of unfriending was evidence of the defendant's guilt in that it



showed the defendant was trying to distance himself from his alleged accomplice. *See id.* at 567. The names on the accounts of both the person who did the unfriending and the person who was unfriended did not identify the real names of the account holder. Thus, the authenticity challenge was twofold: (1) to show that the accounts were held by the defendant and the accomplice, respectively; and (2) to show that the defendant, and not someone else who might have gained access to the account, committed the act of unfriending. *Id.* In that context, the temporal proximity of the alleged crime to the act of unfriending was among the circumstantial evidence from which, we held, a reasonable juror could conclude that the unfriending was done by the defendant. *Id.* at 568, 602-05.

In both *Sublet* and *Sample*, the relevance of the evidence hinged on whether the defendant was the person who generated the evidence at issue—in *Sublet*, the social media communications and in *Sample*, the unfriending. In other words, the authentication issue was not so much whether the evidence was real or fake; the issue was whether the defendant was the actor who created the evidence. So, the act of generating that evidence was a critical piece of the temporal proximity analysis. In contrast, here, the relevance of the piece of evidence—the video—does not hinge on who created it, but instead on whether it was real or fake. Here, the authentication issue was not to show that a particular person created the video; it was whether the State demonstrated that the video was neither fabricated nor altered. And the creation of the video was not a relevant event in the Majority’s temporal proximity analysis. Accordingly, in my view, *Sublet* and *Sample* do not support how the Majority uses temporal proximity here.

### *Silent Witness Testimony*

The Majority tries to fill the gap left by the pictorial method by using the “silent witness” approach to authenticating the video, pointing to “the nature and origin of the video.” Maj. Op. at 34. Recall that the State introduced and entered the video into evidence through the testimony of Mr. Zimmerman. Detective Liu, who received the video, testified *after* Mr. Zimmerman. So, to begin with, the trial court did not admit the video based on the silent witness approach based on Detective Liu’s testimony.

In any event, Detective Liu’s testimony was insufficient under the silent witness approach. Here’s what we know from Detective Liu’s testimony: (1) When officers arrive at the scene of the crime, the first thing they do is look for witnesses and cameras; and (2) he obtained the video from someone with a camera mounted on the exterior wall of his residence. From these two facts, the Majority holds that a reasonable juror could conclude that the “video was recorded by a camera belonging to a local resident and that it was obtained the same night of the shooting.” Maj. Op. at 34.

I have no problem with the first inference—that the video was recorded by a local resident’s camera. But the second inference is a bridge too far. There is no basis to draw any conclusion as to when Detective Liu received the video. Maybe the resident was home when Detective Liu canvassed the area; maybe not. Maybe Detective Liu left a card at the residence’s front door on the day of the shooting and received a call back the next day, or maybe he received a return call in the following weeks or months. The record reveals nothing about *when* Detective Liu received the video.

There is much we do not know, but should know, to be consistent with the standard

this Court has set for the “silent witness” approach to authenticating photos or videos. Which type of camera was used? What media was used to record the images? Where were the images from the camera stored? Did Detective Liu receive a copy of the video or the original? If it was a copy, who made the copy, and when and how was it made? Was the video emailed to Detective Liu? Did he receive a thumb drive? Was Detective Liu given access to a cloud account where the video was stored? Was the video recorded in a format that made it easy to alter? Who had access to the video before it was provided to Detective Liu? Who had access to the video after Detective Liu received it? The inability to answer these questions on this record is troubling, in my view, particularly when compared to other cases in which video evidence was admitted or excluded.

In *Cole*, for instance, this Court held that a videotape of a prisoner’s extraction from his cell was properly authenticated. 342 Md. at 27. There, the prison warden testified that videotaping cell extractions was a routine practice at the prison, that each videotape was routinely labeled with the date and time of the extraction, that each videotape was routinely labeled with the names of the prison officers and inmates involved, that each videotape was maintained in a security vault, and that each videotape could only be viewed by signing it out on a custody form. *Id.*

In *Jackson v. State*, 460 Md. 107 (2018), we held that video footage of an ATM was properly authenticated when a bank employee described in detail the process for obtaining that footage and providing it to police. The employee testified that the process involved accessing a digital video recorder program that prevented him from modifying the video or even copying it to an external storage device. *Id.* at 117. To send the video to the police,

the employee was required to submit a request to bank employees outside of Maryland, who would then mail the video directly to the police. *Id.*

Finally, in *Reyes v. State*, 257 Md. App. 596 (2023), the Appellate Court of Maryland held that a video taken by a man’s residential security camera was properly authenticated when he testified to the camera’s “general reliability” and other pertinent facts, including that he had installed the camera in the front window of the residence, that the camera was motion-activated and would send an alert to his phone when it began recording, and that he received such an alert on the night the video in issue was taken. *Id.* at 612, 631.

In contrast, in *Washington v. State*, 406 Md. 642 (2008), we held that a video was not properly authenticated because an unknown person created the video “through some unknown process” by compiling footage from eight surveillance cameras onto a CD and then copying that footage to a videotape. *Id.* at 655. As we noted, “[t]here was no testimony as to the process used, the manner of operation of the cameras, the reliability or authenticity of the images, or the chain of custody of the pictures.” *Id.* So too here. On this record, there was insufficient evidence to authenticate the video using the silent witness method.

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In sum, the most critical part of the video—the shooting—was not properly authenticated using the pictorial testimony method, the silent witness method, or with other circumstantial evidence. In my view, that part of the video should not have been admitted. I would therefore reverse and remand the case for a new trial.

Accordingly, I respectfully dissent.