

IN THE  
APPELLATE COURT OF ILLINOIS  
SECOND DISTRICT

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THE PEOPLE OF THE STATE	)	Appeal from the Circuit Court
OF ILLINOIS,	)	of Lake County.
	)	
Plaintiff-Appellee,	)	
	)	
v.	)	No. 05--CM--7732
	)	
TERYCK TAYLOR,	)	Honorable
	)	Michael J. Fusz,
Defendant-Appellant.	)	Judge, Presiding.

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**JUSTICE JORGENSEN delivered the opinion of the court:**

Defendant, Teryck Taylor, appeals from his conviction of theft of property worth less than \$300 (720 ILCS 5/16-1(a)(1)(A), (b)(1) (West 2004)). He contends that the evidence was insufficient to prove his guilt beyond a reasonable doubt. He further contends that, because the State failed to lay a proper foundation under the silent-witness approach to authentication for the admission of a surveillance-type videotape, the court erred in admitting the tape. We disagree that the evidence was insufficient. However, we agree that the foundation for the tape was insufficient. Further, we conclude that, although the State had other strong evidence of defendant's guilt, the tape was so central to the State's case that we cannot say that its admission was harmless error. We therefore vacate defendant's conviction and remand the matter for a new trial.

**I. BACKGROUND**

The State charged defendant by information with theft of property worth less than \$300. Defendant moved in limine to bar the introduction of a videotape that apparently showed him taking

the property. He asserted that the State would be unable to lay a proper foundation for its admission. He argued that foundation for a motion picture requires that someone be able to testify that it is an accurate portrayal of what it purports to be. He noted that a party may introduce sound recordings by showing (1) the capability of the device, (2) the competency of the operator, (3) the proper operation of the device, (4) the preservation of the recording with no changes, additions, or deletions, and (5) the identification of the speakers. He suggested that a similar foundation would be proper for a videotape when no witness to the events was available, but asserted that the State would be unable to lay either type of foundation. He also moved to suppress references to purported admissions of guilt to school administrators. The court denied both requests. The State moved to admit evidence of similar crimes by defendant that it asserted showed a fixed modus operandi or unified scheme. The court denied this motion as well. The case proceeded to bench trial.

Detective William Annen of the Deerfield police department testified that, on December 1, 2005, he met with two administrators at Deerfield High School--Paul Mocogni, the facilities administrator, and Kevin Marsh, the dean of students--about thefts from the building. Marsh told Annen that cash had disappeared from a drawer in his desk over the weekend, despite his office door being locked.

To investigate the losses, Annen purchased a "wireless camera," a "digital transmitter," and a "digital video recorder" from a store called "Spy Source"; someone at the store had explained how to use the equipment. Annen hid the equipment in Marsh's office. The camera was in a clock radio and simply needed to be plugged in. Annen explained that the "camera sends a signal to the wireless transmitter which is connected to the DVR which is a digital video recorder, just like a computer drive and that records the images that the camera sees."

The State asked Annen if he had tested the setup. He said that he "turned the unit on, and made sure there was a good picture and that the unit was functioning, that is really all there is to it." The camera had a motion sensor: "[a]ny moving object comes into the viewing area of this camera, it starts the recording process and the DCR [sic]."

During the first period the camera was in place, the DVR did produce a recording, but the light was insufficient; when Annen checked it on December 5, 2005, he could not see anything in the recording. Annen then placed a small lamp on the desk, put a cactus under the lamp, and left a note saying that the lamp should stay on. The State asked Annen if he "reset the motion sensor camera," and Annen replied that he reset it on December 8.

On December 12, he returned to the high school because Marsh had told him that money was missing. Annen viewed the recording on the DVR, using a small monitor that he brought with him. He saw a person "who later was identified as Mr. Taylor." Next, Marsh and Mocogni "viewed the tape with [Annen]." (Emphasis added.) They recognized defendant as appearing in the recording. The State then asked to introduce a copy of the recording. Defendant objected, saying that the foundation was inadequate for the reasons stated in the motion in limine. The court initially agreed and asked for more detail.

The State then asked Annen again if he "reset the camera on December 8th." He replied that, "[o]n both occasions we set the camera to work on the weekend, I set the camera to run between the 8th and the 12th." He also testified that the camera was "working" on the 8th when he left it and "working" when he came back on the 12th.

The State moved again to admit the recording. Defendant again objected. In response to the court's request for a more detailed explanation of what he thought was missing, defendant asserted

that the State should show "capability of the device recording, competency of the operator, proper operation of the device, preservation of [the] recording, no changes additions or deletions and identification of the speakers." He said that his concerns were with the competency of the operator and the functionality of the motion sensor. The State argued that Annen had testified to the accuracy of the recording by describing how he had set it up. The court said it would require more:

"I think there is a little more road you need to go down. You have December 8th, and December 12th, what exactly did the Detective do on December 8th, what did he do to check the connection and recording device, what did he do to check the motion? On December 12th, what did he do to check the transmitter, the hard drive recording device, did he, in fact, review the recording? Why don't you lay that foundation."

The State then asked what precisely Annen had done on December 8. Annen then testified:

"What I do is bring a video monitor with me which at that time was a 13-inch portable monitor that I plug a video feed from the DVR, that allows me to see what the camera is seeing. To give an example, if the camera was faced at the Judge and I was sitting over there, I could watch what the camera is watching on the Judge from that part of the room. I looked at the monitor, saw the camera was aimed at Dean Marsh's desk. Dean Marsh walked in front of the camera, that is how I can check that the motion detector works. Then it started recording when he was in the view of the camera. At that point I did assume that it was operating, it was working in proper order because I could view the picture on my monitor and when Dean Marsh walked in front of the camera it activated, it was good proof for me."

The State asked Annen whether on the 8th he did any specific checking of the connection "between the video feed and [the] monitor it was attached to." Annen replied:

"Just by viewing the picture on the monitor, that does check that the connection is working and everything is working properly. Just by the manager of Spy Source as well as the instruction manual that it came with that I read."

On the 12th, Annen checked that everything was on and that the live feed was showing Marsh's desk.

The defense said that it would "stand on the specific issue of the motion sensor, whether or not that specific device is working." The court said that the State had "established the capability of the motion detector based upon the testimony of December 8th and December 12th" and that if that was the only objection, it would overrule it.

The State then presented the recorded evidence. The item in evidence is a tape in VHS format, less than a minute long. It opens with a display of the following text:

"2005/DEC/13 AM 09:33:56

STOP

NO SIGNAL

START: 2005/DEC/08 PM 02:18:21

END: 2005/DEC/12 PM 04:20:35

GOTO: 2005/DEC/10 AM 02:18:21"

The seconds in the first time listing are changing. The tape then shifts to the recording proper. A time stamp runs in the upper right corner. The recording is black and white and has no sound. The picture quality is fair. The recording starts at the time labeled "2005/DEC/10 AM 04:52:00." A man in a watch cap is standing toward the right side of the frame. He immediately

crouches down next to the desk on which the camera is sited. His hands are mostly hidden by the desktop. His hands rise briefly above the desktop; one hand is holding something that could easily be a bank pouch. He is acting classically furtive--repeatedly glancing backward. This segment runs until the time stamp says AM 04:52:12. There is some, albeit not dramatic, motion throughout the segment. Then the time stamp jumps forward to AM 04:52:41; the man is now rising from the crouch. He then walks out of the range of the camera. This segment runs until AM 04:52:49. The time stamp then jumps to AM 04:52:55 and, with no motion apparent onscreen, runs for a second before stopping. The image in the tape has the aspect ratio of an old-format television, that is, about 4:3.

After the State played the tape, Annen testified that he learned that the person on the tape was defendant. Annen made an in-court identification of defendant. Defendant interrupted the next question to renew his objection to the foundation, noting that the tape showed a sudden jump, so that the State had failed to show the absence of deletions. The court said that it would "sustain the objection at this point." The State pointed out that the time stamp on the tape jumped from 4:52 to 4:52:54 and asked if Annen could explain that. Annen then testified that the system would record for 30 seconds after detecting motion, but would stop at the end of that time if it detected no new motion. He suggested that it had stopped recording when the desk had hidden any motion.

After Annen's explanation of the gap in the tape, the State did not move anew for the tape's admission, but simply started asking about whether it appeared that defendant had taken something out of the desk. The defense objected to this question, saying that this was not in Annen's personal knowledge, and the court ruled that the tape spoke for itself.

The State then asked Annen, "was that recording [just shown] what you viewed at [sic] Mr. Mocogni and Mr. Marsh on the 12th." Annen agreed that it was. It next asked him whether "[t]hat was the recording that you took from the alarm clock motion sensor camera that you placed on his desk approximately two weeks before," and Annen agreed that it was. It then asked whether, after Marsh and Mocogni identified defendant as the person on the tape, Annen and a Detective Kupsak interviewed defendant, and Annen said that that had happened in a meeting on January 4, 2006. The State asked Annen what defendant had said "about his role in regard to the events that took place on December 10, at Deerfield High School." Annen said that defendant admitted taking money from the desk.

On cross-examination, defense counsel asked if defendant had made a written statement. Annen said that defendant had received Miranda warnings before saying anything. After making his admissions, defendant dictated a statement. Annen agreed that, in the written statement, defendant did not admit to the theft. Annen also explained that, although the clock camera was on all the time, recording would start only when something triggered the motion sensor. He admitted that the recording had shut off while someone was in front of the camera.

On redirect, Annen explained that the written statement included defendant's admissions to other thefts, which involved much larger amounts, and that those were Annen's focus in the interrogation. The State asked him whether "[a]s this recording exists, besides focusing your recording on this specific incident, has it been altered in any way," and Annen said that it had not. He also explained that the camera had a setting for how long recording would continue after the motion detector triggered. He had it set for 15 seconds (not 30 seconds, as he had said before).

At that time, the court granted the State's motion to admit the tape.

During re-cross-examination, the court, with both parties' agreement, questioned Annen about the motion sensor. Annen said that the DVR would record for a certain period after it detected motion. He said that it was supposed to continue as long as motion continued. The court asked why, if the camera was supposed to continue recording as long as motion continued, defendant appeared in different positions on each side of the jump. Annen suggested that defendant had been still long enough for the recording to shut off. It stopped when defendant was behind the desk and started again when he rose to leave.

With Annen's testimony complete, the State next called Marsh, who testified that he sometimes held cash that came from fundraisers for the school or organizations. He had an office with a locking door and a desk with locking drawers. When he had cash, he would put it in envelopes, put the envelopes in a zippered bank pouch (which was brown and about 12 by 5 inches with a zipper at the top), and put the pouch in a desk drawer. On December 9, 2005, a Friday, he left \$90 in an envelope in the pouch. The door was locked when he left, but the desk drawer was not. He did not enter his office over the weekend. On Monday, at about 6 a.m., he found that the pouch was short \$20; he recalled that it was a \$20 bill that was missing.

The State asked to play the recording again, and defendant again objected to no avail. Marsh identified his office and items on his desk. He said that the drawer in which he had placed the money was below the level of the screen, but that it appeared that defendant was doing something with one drawer. At one point, he recognized the object that defendant was holding as the zippered bank pouch; he initially said that the object "appear[ed]" to be the pouch, but then agreed that he was positive that it was.

Mocogni, Deerfield High School's director of building and grounds, was the next State witness, testifying that defendant was a night watchman for Deerfield High School. The State played the tape again and Mocogni recognized the person on the tape as defendant. Mocogni said that, after the police first showed him the tape, he and other school officials met with defendant. At that meeting, defendant admitted taking \$10 from Marsh's office on December 10.

The State then rested. Defendant moved for a directed finding, and the court denied it, considering, among other things, the evidence of the tape.

Defendant did not call any witnesses, but did get the court to admit as evidence defendant's dictated statement to police and one participant's summary of defendant's meeting with administrators. In the statement to police, he admitted to a theft of \$400 in May 2005 and a theft of \$560 in July 2005. In the statement to the administrators, he admitted to three or four thefts of "gas money," including a theft of \$10 from the "dean's office" on December 10, 2005.

The court found defendant guilty. It noted the existence of the 30-second gap in the tape, but stated that Annen had successfully explained it; nothing pointed to intentional destruction of evidence. It stated that the tape established defendant's presence in the office and showed him with the bank pouch. It concluded that this evidence, even without the admissions, was sufficient to convict him. Further, it deemed credible the testimony of Mocogni and Marsh, also noting that Annen, although embarrassed by the absence of reference to the December 10 theft in defendant's written statement, was credible as well. It concluded, "the bottom line is \*\*\* even without these admissions \*\*\* I think there's more than enough."

Defendant filed a timely posttrial motion, asserting that the court had improperly admitted both the videotape--the argument paralleled the motion in limine--and the confessions. The court

denied the motion and sentenced defendant to 30 days in jail, conditional discharge, restitution, and fees.

Defendant timely appealed. He asserts (1) that the evidence was insufficient to prove his guilt beyond a reasonable doubt and (2) that because the State failed to provide a proper foundation for the admission of the surveillance tape under the silent-witness theory, the court improperly admitted the tape. Defendant asserts that we should review the admission of the tape de novo; the State asserts that our review is for an abuse of discretion.

## II. ANALYSIS

The admission of the surveillance tape was error. Although defendant does not argue that the surveillance tape is irrelevant or immaterial to the proof of the elements of the charge, we determine that, subject to a proper foundation, the surveillance tape would be relevant and material evidence. We begin by explaining these determinations and then turn to the questions of whether the error was harmless and whether defendant can be retried, thereby addressing defendant's contention that the evidence was insufficient. We conclude that the error was not harmless and that defendant can be retried. After we explain our reasons for the aforementioned determinations, we then consider the proper foundation for admission of evidence such as the surveillance tape.

By way of background, we note that the law recognizes two ways to provide a foundation for the admission of an audio or visual recording (audio recording, film, videotape, photograph, etc.). The necessary foundation depends upon whether a witness can authenticate the contents of the audio or visual recording based on personal observation of the event or sound on the recording, or authenticate the workings of the device and process that produced the recording. The traditional foundation occurs where a witness is available and can authenticate the content of the recording; a

court can admit such a recording as demonstrative evidence because the witness testifies that the recording accurately represents what he or she personally saw or heard. Additional authentication such as a chain of custody is not necessary.

Alternatively, when no witness can authenticate the recording as a true and accurate recording of what the witness saw or heard, a court can admit such an audio or visual recording as primary, substantive evidence based on a foundation that establishes the recording's accuracy and authenticity by other means. When the recording is a visual recording, courts often describe this as authentication under a silent-witness theory. E.g., People v. Vaden, 336 Ill. App. 3d 893, 898 (2003). This label is appropriate, as such evidence cannot be demonstrative, that is, it is not an illustration of an ordinary witness's testimony, and so must be substantive.<sup>1</sup>

The traditional foundation for the admission of a visual recording (without sound) is the same as that for a photograph. People v. Smith, 321 Ill. App. 3d 669, 674 (2001); see also People v. Mines, 132 Ill. App. 2d 628, 631 (1971) (holding that both photographs and "videotape films" are admissible upon a showing that they "clearly and accurately portray that which they purport to

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<sup>1</sup>Others have pointed out that the theory behind conventional authentication of a photograph or motion picture carries with it the implicit limitation that that evidence is usable only to illustrate a condition that some witness noticed at the time, that is, as demonstrative evidence. Where, for instance, after-the-fact examination of a visual recording reveals evidence of a crime unnoticed by witnesses at the time, a court cannot treat the evidence as merely demonstrative. See People v. Bowley, 59 Cal. 2d 855, 861, 382 P.2d 591, 595, 31 Cal. Rptr. 471, 475 (1963). This reasoning warns us that, where more relevant information exists in a visual recording than a witness can vouch for, a traditional foundation may be inadequate.

represent"). Traditionally, that foundation simply required that a witness identify the evidence as a depiction of a condition relevant to the matter being tried and verify on personal knowledge that the depiction is a correct representation of that condition. See People v. Donaldson, 24 Ill. 2d 315, 318 (1962) (setting out that standard). This standard requires that the verifying witness have direct knowledge of the events depicted:

"A sufficient foundation is laid for a still photograph, a motion picture, or a videotape by testimony of any person with personal knowledge of the photographed object at a time relevant to the issues that the photograph is a fair and accurate representation of the object at that time \*\*\*." (Emphasis in original.) M. Graham, Cleary & Graham's Handbook of Illinois Evidence §401.8, at 135 (8th ed. 2004).

This standard thus excludes any photograph or visual recording when no witness confirms the accuracy of every material aspect of the depiction. It therefore will usually exclude evidence produced by a surveillance camera.

However, surveillance cameras can provide highly probative evidence despite the lack of any available witness to the events that they record, so reliance on the traditional method of authentication alone would result in exclusion of evidence that could improve the reliability of a trial's outcome. United States v. Taylor, 530 F.2d 639, 641-42 (5th Cir. 1976), is the first widely cited case to address the admissibility of visual recordings made by automatic surveillance cameras. In Taylor, an automatic still camera in a bank was triggered only after a bank robber had locked the bank employees in the vault. Nevertheless, the United States presented testimony "as to the manner in which the film was installed in the camera, how the camera was activated, the fact that the film was removed immediately after the robbery, the chain of its possession, and the fact that it was

properly developed and contact prints made from it." Taylor, 530 F.2d at 642. The Court of Appeals held that "such testimony furnished sufficient authentication for the admission of the contact prints into evidence." Taylor, 530 F.2d at 642.

Silent-witness authentication of visual recordings has been adopted in only one Illinois case, Vaden. The Vaden court reviewed out-of-state cases considering silent-witness authentication, concluding that such authentication had become widely accepted and should be accepted in Illinois. Vaden, 336 Ill. App. 3d at 898. It then ruled that the State had provided sufficient authentication for a surveillance tape where an officer testified that he had set up video surveillance equipment many times, the equipment was in proper working order, the officers observing the scene could see that no one had interfered with the video equipment, and an officer sealed the tape in an evidence bag as soon as the transaction recorded was over. Vaden, 336 Ill. App. 3d at 898-99. The court also concluded that the State had authenticated the tape through an officer's testimony that the video accurately represented what he had seen, and thus it held that the tape was authenticated twice. Vaden, 336 Ill. App. 3d at 899. The Vaden court's approbation of the silent-witness approach was not purely dicta, as the court's decision implicitly allowed the tape to serve as substantive evidence.

Silent-witness authentication is necessary if courts are to be able to admit most surveillance recordings as evidence. Admission of recordings, when they are shown to be authentic, enhances the truth-finding ability of the trier of fact. We agree with the Vaden court that silent-witness authentication of visual recordings should be accepted in Illinois.

We have discussed both traditional and silent-witness authentication; the question now is which authentication method is applicable here. The State asserts that the traditional method is sufficient and that it met this burden because witnesses identified both the person shown in the tape,

defendant, and the locale appearing, Marsh's office. It points to a holding in Smith, a First District decision, in support of that claim. Smith, 321 Ill. App. 3d 669. We deem that the Smith court misunderstood the traditional method and hold that the silent-witness method is necessary for the authentication of the video recording here.

In Smith, the appellate court held that the trial court could admit the video portion of a tape in which the defendant discussed with an associate his involvement in a crime. The tape was given to the police without explanation as to its origin and without authentication. The basis for the admission was merely a detective's identification of both men seen on the tape; the detective did not testify to having seen the meeting. Smith, 321 Ill. App. 3d at 675. However, the Smith court reached the opposite conclusion regarding the admission of the audio portion of the tape, holding that the trial court should not have admitted the audio portion without a silent-witness authentication. Smith, 321 Ill. App. 3d at 675.

We see these results as illogical and inconsistent with the established requirements for traditional authentication. That a witness recognizes the persons appearing in a visual recording is no guarantee that the recording is an accurate depiction of the event portrayed in the recording. Given the possibilities for fabrication, it is not even a guarantee that the participants were all present together at a given time. Visual recordings are subject to alteration (as are sound recordings), so no reason exists to allow more relaxed rules for the admission of visual recordings than for the admission of audio recordings.

The advent of digital recording and computer technology has created an environment in which modification, manipulation, and sheer fabrication of images have become much more common. Thus, strict adherence to a silent-witness foundation becomes all the more important to

ensure the integrity of admissible evidence. We therefore conclude that, where no witness can testify as to the authentication of the recording as truly and accurately portraying what he or she has seen or heard, the requirements for a silent-witness foundation must be met. See Vaden, 336 Ill. App. 3d at 899.

The Third District has adopted the silent-witness theory as a means for authenticating videotapes, noting that the method is virtually the same as that used to authenticate audio tapes when there is no party to the conversation to testify at trial to the accuracy of the recording. Vaden, 336 Ill. App. 3d at 898. A proper silent-witness foundation for audio tapes has been described to include consideration of a number of factors. "A sufficient foundation for a sound recording when there is no party to the conversation to testify to the accuracy of the recording may be laid if there is evidence as to the capability of the device for recording; competency of the operator; proper operation of the device; preservation of the recording with no changes, additions or deletions; and identification of the speakers." Vaden, 336 Ill. App. 3d at 899, citing Smith, 321 Ill. App. 3d at 675.

We note, however, that an authentication of a videotape does not necessarily have to include identification of the persons portrayed in the video. For example, an otherwise authenticated videotape might be relevant and material to show that an unidentified intruder entered through a window even though the identity of the intruder is not ascertained.

Applying the principles of silent-witness authentication to the facts here, we conclude that the State failed to meet the proper foundation for the admission of the videotape. In People v. Estrada, 91 Ill. App. 3d 228 (1980), a Third District panel, examining the silent-witness authentication of an audio tape, held that " '[w]hen a colorable attack is made as to a tape's authenticity and accuracy, the burden on those issues shifts to the party offering the tape.' " Estrada,

91 Ill. App. 3d at 238, quoting United States v. Starks, 515 F.2d 112, 122 (3d Cir. 1975). A closely related principle applies to the authentication of drug evidence: "Unless the defendant produces actual evidence of tampering, substitution, or contamination, the State need only establish a probability that tampering, substitution, or contamination did not occur." People v. Garth, 353 Ill. App. 3d 108, 114 (2004).

Here, the State failed to establish even the probability that the tape had not been subject to tampering. Defendant, by pointing to the obvious jumps in the tape, raised a serious challenge to the integrity of the evidence. The State responded with a possible explanation of them, the functioning of the motion detector. However, Annen's explanation did not account for the timing between the jumps: he said that the DVR was set to run for 30 (or, in other testimony, 15) seconds after something triggered the motion detector, but one recorded segment is only 6 seconds long. This also raised questions as to the capability of the system that produced the recording and the proper operation of that system.

More important, the State completely failed to provide any evidence to exclude the possibility that the recording on the tape was the product of editing, intentional or otherwise, of the raw original recording. The central problem for the State is that it failed to address the fact, obvious in retrospect, that the tape is not the original. The VHS tape in evidence could no more come directly from a DVR than a cassette tape could come from a CD burner. The tape is thus a copy; it is not even an exact duplicate, but is the product of a digital-to-analog conversion. Nothing in evidence addresses how the tape was made, what process was used to transform the original data to the tape produced in court, or by whom the work was done.<sup>2</sup>

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<sup>2</sup>An unsigned police report attached to defendant's motion in limine states that someone,

Annen's testimony was insufficient to establish that the recording was unaltered. Annen did, in response to the State's question, agree that the recording in court was unaltered in any way, but that was not adequate. The most obvious problem was that Annen's testimony established only that the recording in court was the same as the one he watched with Marsh and Mocogni, thus failing to establish that it was the same as the original recording. However, a more fundamental problem existed. The recording on the tape was both rich in detail and vulnerable to modification. Because modifications were not necessarily obvious, some concrete basis was necessary to assert that the recording was unchanged. By far the strongest evidence of lack of modification is proper protection of the recording from modification--essentially, a chain of custody. Mere testimony that a witness does not detect any differences from an earlier viewing is unsatisfactory as a foundation for substantive evidence. Such testimony rests on a witness's ability to detect modifications and is only as reliable as the witness's recollection. A recording admitted on such a basis might perhaps illustrate a witness's recollection of what he or she saw in an earlier viewing, but it is inappropriate where the recording, in all its specific details, is to stand alone as evidence.

We recognize that certain items of evidence are properly admitted simply on testimony that they are unchanged. "If an item possesses unique and readily identifiable characteristics and is relatively impervious to change, testimony the item sought to be admitted is the same one recovered

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presumably Annen, on December 16, 2005, "made a copy of the video surveillance on the hard drive, specifically the segment where Taylor was in Marsh's office onto a VHS tape." The writer "removed the tape's recording tab and locked it in [his] desk, to be later locked in an evidence locker." This report, of course, is not evidence. However, taken at face value, the report, while giving some explanation of the tape's origin, also shows that the police edited the recording.

and in substantially the same condition as when recovered provides an adequate foundation for admission into evidence." (Emphasis added.) People v. Echavarria, 362 Ill. App. 3d 599, 603 (2005). However, it is a matter of general knowledge that a visual recording, particularly in a digital format, is not "relatively impervious to change." Thus, if the State cannot show that a visual recording was preserved in all its particulars, the recording cannot substitute for a live witness.

Because the State failed to provide any explanation about how the images shown in court got from the DVR to the VHS tape, it failed to establish even the probability that tampering did not occur. The State might respond that it is probable that Annen and the police department handled the tape in a way reasonably designed to prevent tampering, even if that reasonable handling did not come out in testimony. Officers usually do handle evidence responsibly, but to allow a court to assume that particular officers did in a particular case would be to make foundations optional. An assumption of reasonable handling is particularly inappropriate in a case such as this one, where the evidence has been transformed in an unexplained manner.

A comparison with two factually similar out-of-state cases reinforces our conclusion that the failure to describe the copying made the State's foundation fatally defective.

In the Maryland Supreme Court case of Washington v. State, 406 Md. 642, 961 A.2d 1110 (2008), the court held, based on a failure to explain copying procedure, that the State had laid an insufficient foundation for the admission of a videotape. An eight-camera surveillance system at a bar made the original visual recording at issue. An unknown employee of the security company that maintained the cameras copied the relevant data from whatever storage device it was on at the bar to a CD-ROM. (The court viewed a VHS videotape copy of the CD-ROM, but the parties stipulated that the tape was an accurate copy of the CD-ROM.)

"[T]he owner of the bar[] testified that he did not know how to transfer the data from the surveillance system to portable discs. He hired a technician to transfer the footage from the eight cameras onto one disc in a single viewable format. [The owner] did not testify as to the subsequent editing process and testified only that the surveillance cameras operated 'almost hands-free' and recorded constantly. [The investigating detective's] testimony also failed to authenticate the video. He testified that he saw the footage only after it had been edited by the technician." Washington, 406 Md. at 655, 961 A.2d at 1117-18.

These facts closely parallel those at issue here. In Washington, the lack of evidence about how the recording was transferred from the original storage device to another medium rendered the foundation incomplete. So too here.

By contrast, in Commonwealth v. Leneski, 66 Mass. App. 291, 846 N.E.2d 1195 (2006), a Massachusetts appellate court held that the Commonwealth had laid a sufficient foundation for a CD copy of a DVR surveillance recording when the person making the transfer explained the process. The owner of the store where the recording was made "viewed the images on the computer and 'burned' the CD copy; he testified as to the procedure he used in the surveillance process, the copying process, and to the contents of the CD." Leneski, 66 Mass. App. at 295, 846 N.E.2d at 1199. Any further questions about the reliability of the recording went to the weight, not the admissibility, of the evidence. Leneski, 66 Mass. App. at 295, 846 N.E.2d at 1199. We deem problematic in the phrasing of the decision the suggestion that mere testimony about the transfer process formed a sufficient foundation. The ability of a witness to explain how he or she has achieved a result is no guarantee of its reliability. However, if we make the reasonable assumption that the reviewing court meant that, at each stage, the store owner gave testimony that satisfied the trial court that the step

was reliable, the result is sound. Regardless, the decision is consistent with the need to explain the process by which a visual recording has been copied.

We now turn to the question of the proper standard of review. The State asserts that the admission of a piece of evidence is always a matter for the court's discretion. Defendant asserts that the proper foundation for the admission of a piece of evidence is a question of law and that this court's review is therefore de novo.

The decision to admit a piece of evidence rests in the sound discretion of the court. People v. Tenney, 205 Ill. 2d 411, 436 (2002). The court's discretion cannot be unbridled; the law and facts constrain it. See People v. Caffey, 205 Ill. 2d 52, 89 (2001) (a court uses an abuse-of-discretion standard unless the exercise of discretion has been frustrated by an erroneous rule of law). When an evidentiary decision is not properly grounded in the law and facts, it simply cannot be a sound exercise of discretion. Thus, review of whether an evidentiary decision was proper will require a subinquiry into the governing law, in which the reviewing court need not be deferential, and a subinquiry into the relevant facts, in which it necessarily must be deferential. Here, in our nondeferential inquiry we conclude that the State had the burden of showing the capability of the device for recording; the competency of the operator; proper operation of the device; preservation of the recording without change, addition or deletion; and the identification of the persons, locale, or objects depicted sufficient to make a clear showing of relevance. This burden implicitly included a preservation of a chain of custody and explanation of any copying such that during that process there were no changes, additions, or deletions. In our deferential inquiry, we conclude that the evidence plainly shows that the device was not operating properly; that there was no preservation

of the original recording; that there was no proper chain of custody; and that an unexplained copying took place.

Having concluded that the court erred in admitting the tape, we now turn to the issues related to the strength of the evidence. Defendant asserts that, even with the tape, the evidence was insufficient to prove his guilt beyond a reasonable doubt. Defendant thus argues that double-jeopardy principles bar his retrial. The State, by contrast, asserts that the evidence of defendant's guilt was so strong, even without the tape, that any error in the admission of the tape is harmless. We conclude that the evidence at trial was sufficient to sustain defendant's conviction and thus strong enough to allow his retrial. On the other hand, absent the evidence of the tape, it was not so strong that we can say beyond a reasonable doubt that the court would have convicted defendant absent the tape's erroneous admission.

We first explain why we reject defendant's claim that the evidence, even considering the tape, was insufficient to sustain his conviction. A reviewing court must not set aside a criminal conviction on grounds of insufficient evidence unless the proof is so improbable or unsatisfactory that there exists a reasonable doubt of the defendant's guilt. People v. Pollock, 202 Ill. 2d 189, 217 (2002). "When reviewing the sufficiency of the evidence to sustain a verdict on appeal, the relevant inquiry is 'whether, after viewing the evidence in the light most favorable to the prosecution, any rational trier of fact could have found the essential elements of the crime beyond a reasonable doubt.' (Emphasis omitted.)" Pollock, 202 Ill. 2d at 217, quoting Jackson v. Virginia, 443 U.S. 307, 319, 61 L. Ed. 2d 560, 573, 99 S. Ct. 2781, 2789 (1979). The double jeopardy clause precludes a second trial giving the State another opportunity to offer evidence not presented in the first trial. See People v. Taylor, 76 Ill. 2d 289, 309 (1979). We have considered the sufficiency of the evidence solely to

remove the risk of subjecting defendant to double jeopardy. See People v. Nuccio, 263 Ill. App. 3d 315, 318 (1994). We conclude that a rational trier of fact could have found beyond a reasonable doubt the essential elements of the offense of theft of property worth less than \$300.

Here, although defendant can fairly point to flaws in every piece of evidence considered individually, the evidence considered as a whole was strong. The tape had weaknesses as evidence that go beyond the lack of a proper foundation. The most obvious is that the recording does not show the actual theft. Thus, it was critical that the evidence effectively link the time of the recording to the weekend that the money disappeared. However, because Annen did not testify about how the timer for the DVR or the time stamp was set, the link stems mostly from an assumption that he knew what he was doing when he set them. This assumption might be weak, given that this was Annen's first case using the equipment. Further, that the record of the police interview does not include an admission to this theft and the record of the administration interview includes only an admission to taking a different amount weakens both of defendant's apparent admissions. To give weight to these admissions, one must assume (1) that Annen's recollection of the interview was more detailed and accurate than the written memorialization, and (2) that the inconsistency between defendant's statement to the administrators and the facts otherwise adduced are of little significance. Nevertheless, the court could reasonably have found the evidence sufficient. Alternative explanations for the images on the tape are implausible. We deem it unlikely that defendant entered Marsh's office and examined the bank pouch without taking money and that someone else came in and took the money at some other time. The tape, even with its flaws, nevertheless remains quite persuasive. Defendant's admissions reinforce the State's case, particularly given that the witnesses

were, by the court's determination, credible. We thus hold that the evidence was sufficient to sustain defendant's conviction and thus to permit his retrial.

That said, we also disagree with the State's contention that the error was harmless. "When the competent evidence in the record establishes the defendant's guilt beyond a reasonable doubt and it can be concluded that retrial without the erroneous admission of the challenged evidence would produce no different result, the conviction may be affirmed." People v. Arman, 131 Ill. 2d 115, 124 (1989). The trial court noted that it found the tape particularly persuasive, saying that "even without the admissions" it found the tape to be "more than enough." The court thus made clear that it thought that the tape was the keystone of the State's evidence. With the other evidence alone, that is, primarily the reports of defendant's admissions, the case would be profoundly different. Certainly, the court deemed Annen to be credible in reporting the admissions. However, we cannot disentwine that credibility determination from the court's reaction to the tape. Credibility is not necessarily purely a matter of demeanor. A person can become more credible by saying plausible things, and what is plausible often depends on the other evidence. Annen's failure to memorialize defendant's admission might appear in a much less favorable light absent the tape's support for the admission's truth. Similarly, without the tape to apparently pin down the time of a particular theft, defendant's rather nonspecific admission to the administrators could become an admission to thefts in general, perhaps the same ones memorialized in Annen's written report, and not to the particular theft that the State was prosecuting in this case. Thus, we cannot say that the tape's admission was harmless.

Because defendant may have a new trial in which the State will be entitled to try to lay a proper foundation for the tape's admission, we will address in some detail what a proper foundation would be.

Vaden held that a silent-witness authentication was acceptable in Illinois and adopted the factors for authentication of a silent-witness audio recording without providing detail about the structure of such an authentication. Vaden, 336 Ill. App. 3d at 899. The structure that courts have required for silent-witness authentication varies greatly from jurisdiction to jurisdiction. In State v. Haight-Gyuro, 218 Ariz. 356, 359-61, 186 P.3d 33, 36-38 (App. 2008), for instance, an Arizona appellate panel noted that some states have taken a formalized approach to silent-witness authentication, whereas others have used more general guidelines. Alabama, it noted, has adopted a seven-element test, requiring of the proponent "(1) [a] showing that the system used 'was capable of recording what a witness would have seen or heard had a witness been present at the scene or event recorded'; (2) [a] showing that the operator was competent; (3) 'establish[ment] ... [of] the authenticity and correctness of the resulting recording'; (4) [a] showing [that] no alterations had been made; (5) [a] showing [of] the manner by which the 'recording ... was preserved'; (6) 'identif[ication of] ... the speakers, or persons pictured'; and (7) in criminal cases, [a] showing [that] any statements made were voluntary." Haight-Gyuro, 218 Ariz. at 359, 186 P.3d at 36, quoting Ex Parte Fuller, 620 So. 2d 675, 678 (Ala. 1993). Indiana, by contrast, simply "requires a ' 'strong showing of the [recording's] competency and authenticity," ' based on the facts and circumstances of the case." (Emphasis omitted.) Haight-Gyuro, 218 Ariz. at 359, 186 P.3d at 36, quoting Kindred v. State, 524 N.E.2d 279, 298 (Ind. 1988), quoting Bergner v. State, 397 N.E.2d 1012, 1017 (Ind. App. 1979).

As we have suggested, the rules for silent-witness authentication of visual recordings typically parallel the rules for authentication of audio recordings. Where no witness testifies to the recording's accuracy, a silent-witness authentication is permissible. As best we can determine, such a foundation was first accepted in Illinois case law by the court in Estrada. The Estrada court, citing

an unspecified edition of Cleary and Graham's Handbook on Illinois Evidence, held that "[a] foundation can be established through testimony as to (1) capability of the device for recording, (2) competency [of] the operator, (3) proper operation of the device, (4) preservation of the recording with no changes, additions, or deletions, as well as (5) identification of the speakers." Estrada, 91 Ill. App. 3d at 238.

This court could, in the tradition of adapting analogous precedent, simply hold that the audio recording standard applies, with obvious modifications, to the admission of a visual recording. The law often progresses by such steps. While we do recognize precedent, it gives us pause to realize that the standard set out in Estrada dates back in most of its details at least as far as 1955. See, e.g., Steve M. Solomon, Jr., Inc. v. Edgar, 92 Ga. App. 207, 211-12, 88 S.E.2d 167, 171 (1955). Although the goal of a proper foundation, ensuring the authenticity and reliability of the recording, has not changed since the 1950s, the central concerns have shifted. The competency of the operator and the proper operation of the device strike us as understandable foci of attention in the era of mechanically complex and potentially balky reel-to-reel recorders. But the modern substitutes for those awkward devices (and the substitutes' modern video analogues) are typically so easy to operate that a person without experience with the older devices may wonder what courts meant by "the competency of the operator." Our concerns now focus on the ease of editing audio and visual recordings and the potential for outright fakery. Further, we recognize that, when a court may be considering visual recordings from, for instance, a mall or casino with hundreds of cameras linked to a computer network, the conceptions of the nature of evidence implicit in decades-old standards may be a poor fit with the forms of evidence with which a modern court may be confronted. We are

hesitant to endorse for new purposes the standards of a different technological era where our courts have not yet adopted them.

Under the circumstances, we think that an examination of basic principles will be useful, allowing us to reflect upon what a court is trying to accomplish when asking for a foundation. In 1956, our supreme court held that wire recordings should be admissible when a "proper foundation has been laid to assure the authenticity of the recording and its consequent reliability." Belfield v. Coop, 8 Ill. 2d 293, 304 (1956). This has not changed. To put the goal more broadly, a court must always ensure that the recording is not misleading. To do so, we think that a court must ensure that the offering party has made a proper showing of the authenticity, accuracy, reliability, and relevance of the recording.

We will start by considering relevance. To be relevant, a visual recording must have a sufficient link to the offense. That will usually mean a link of time or place. Here, the State needed to establish that the tape showed the scene of the offense--Marsh's office--and that it did so at a time when the offense might have been committed. The State established the tie to the location when Marsh recognized that the tape depicted the interior of his office. The State could establish the time that the tape depicts through the time stamp and through when Annen set the DVR to record. However, if it uses those technological means to establish relevance, it must show that whatever timing device relied upon was functioning properly and was properly set. We do not exclude the possibility that, in future cases, parties may use other technological means of establishing the relevance of visual recordings; GPS tagging to establish location is a plausible example. Trial courts will necessarily deal with other technologies as they arise. Here, however, we have no difficulty assuming that electronic timers may be reliable means of establishing date and time, but leave for

another discussion the evidentiary threshold for the admission of the date and time, GPS loci, or other recorded information that may appear in a video recording.

Establishing authenticity, accuracy, and reliability requires showing a lack of alteration of the visual recording.<sup>3</sup> For this, the traditional audio recording standards, because courts did not create them with easy alterability as a specific concern, do not alone provide particularly good assistance to a trial court. Given the ease of alteration to digital media and data, decisions discussing drug evidence better address the problems. In such cases, "[t]he State must demonstrate that the evidence has not been changed in any important respect and is required to establish that it took reasonable protective measures since the substance was seized." People v. Bishop, 354 Ill. App. 3d 549, 560 (2004). In such cases, the method of showing this is inevitably a chain of custody.

"In determining the adequacy of the chain of custody of an item sought to be introduced into evidence, the characteristics of the item are an important consideration. If an item possesses unique and readily identifiable characteristics and is relatively impervious to change, testimony the item sought to be admitted is the same one recovered and in substantially the same condition as when recovered provides an adequate foundation for admission into evidence. [Citation.]

If the item is not readily identifiable or is susceptible to alteration by tampering or contamination, its 'chain of custody must be established by the State with sufficient completeness to render it improbable that the original item has either been exchanged,

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<sup>3</sup>Instances where a recording was apparently created by a defendant, or with his or her cooperation, present a different set of issues. Our discussion here is not well-matched to such cases.

contaminated, or subjected to tampering.' " Echavarria, 362 Ill. App. 3d at 603-04, quoting People v. Cowans, 336 Ill. App. 3d 173, 176 (2002).

Given that alteration of a visual recording may be subtle, for instance by removal of an identifying mark on a person, a visual recording is, for these purposes, more like a baggie of cocaine than a gun. An adequate chain of custody will thus generally be necessary to authenticate a visual recording.<sup>4</sup>

To show that a visual recording is unaltered, its proponent should show that it is complete. But when a recording is complete is not altogether obvious. The unit of a digital visual recording is generally a data file, but a data file does not necessarily correspond with what a person would think of as an entire piece of evidence. Here, for instance, the DVR might create a new file every time it starts recording. On the other hand, it might create a new file every hour. The problem can only be intensified if, for instance, multiple cameras are involved. The temptation will always be for a party to select the files most supportive of its position. Only if the court can require the proponent of the evidence to have selected files based on clearly stated and bias-free criteria can the difficulty be minimized.

The ideal way to show that a visual recording is unaltered is to provide a truly unmodified physical original. A Polaroid photograph is the ideal instance of such an original. In the current technological environment a proponent of evidence will rarely be able to provide anything that is so plainly an original. We are aware that digital images are usually processed--most typically

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<sup>4</sup>We recognize that digital signatures and the like may be available as evidence of a lack of alteration of a recording. We do not wish to discourage their use, as they may prove to be more robust indicators of lack of alteration than chains of custody. However, we think that the proponent of such a method should show that it is as reliable as the method it replaces.

compressed--before they are recorded to storage media, such as flash memory or hard drives. What the court needs to know is, within the scope of a "complete" document as discussed above, whether the content of the visual recording has been materially altered. This process, as we have just suggested, is much easier if the proponent of the evidence can produce something that is recognizably an original. Here, for instance, the DVR must have produced something that was the original recording by any reasonable definition. The State must either produce that original, showing that it was reasonably protected from alteration, or else show that the custodian used a reliable method to produce a materially unaltered copy.<sup>5</sup>

Beyond the problems created by digital records, a showing of reliability still requires some examination of the capability of the device. No visual recording device produces a result identical to what a human witness would see. Depending on the nature of the changes, they might or might not be misleading. Most of these changes are so obvious as to require no explanation: we take it for granted that films and video recordings, unlike visual fields, are limited to perfect rectangles. Here, nothing was misleading about the tape being in black-and-white, provided, of course, that the lack of color was not the result of editing. On the other hand, if a visual recording differs from what a human witness would see in less familiar ways, such as by showing infrared light, those differences could lead an unprepared trier of fact astray. In Alabama's very formalized foundation requirements, the proponent of the evidence must show that the device "was capable of recording what a witness

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<sup>5</sup>We do not mean to encourage a heavy reliance on recordings maintained on easily alterable media such as hard drives. We recognize that a prompt and proper transfer of recordings to media such as CDs and DVDs that can be preserved in secure storage may be one of the best ways to protect recordings from alteration.

would have seen or heard had a witness been present at the scene or event recorded." Fuller, 620 So. 2d at 678. This is not a helpful standard. To the contrary, even though a visual recording varies from what a witness would have seen or heard, as long as it is still accurate and will not mislead a properly instructed trier of fact, that visual recording may still be reliable.

The question of reliability also implicates the matter of processing. As we noted when discussing what an original is, most digital visual recordings are processed automatically, at least to the extent of being compressed, when they are made. Processing choices made before someone views the images simply go to the capability of the device. If someone decides ahead of time that the device should compress the images to the extent that the compression degrades them, or decides to use settings that reduce (visual) noise or enhance contrast, such decisions are not different in their effect from decisions about what sort of devices to use. Processing choices made after the fact are more problematic, as a person involved in a case, such as a police officer, might make choices that serve to enhance a desired impression. Further, such processing might involve use of an editing program. Use of such programs greatly increases the opportunity for outright fakery. We do not wish to discourage proponents of evidence from deliberately processing to improve the viewability of visual recordings. However, where this has occurred, the unprocessed visual recording should be the primary evidence, with "enhanced" versions admitted only as an aid to the trier of fact's understanding.

Ultimately the standard first enunciated in Estrada and adopted by Vaden is still the law in Illinois and we embrace those factors. However, we also have commented at some length about the context in which a court considers the admissibility of a visual recording under the broad factors for silent-witness authentication (see Vaden and Smith). When admitting a visual recording as

substantive evidence, a court must recognize that alteration through outright fakery, well-intentioned editing, or even unintentional modification is now, because of its ease, an unavoidable concern. On defendant's retrial, the foundation for the visual recording as substantive evidence must meet the factors discussed.

### III. CONCLUSION

The State did not lay a proper foundation for the videotape; thus, the trial court erred by admitting it. The tape was too central to the State's case to be harmless error. We therefore vacate defendant's conviction. However, we reject defendant's contention that the evidence including the tape was insufficient to sustain his conviction. Consequently, defendant is subject to retrial, with the tape to be admissible only on a foundation consistent with what we have described.

Vacated and remanded with directions.

HUTCHINSON and SCHOSTOK, JJ., concur.