Filed: November 29, 2012

IN THE SUPREME COURT OF THE STATE OF OREGON

STATE OF OREGON,

Respondent on Review,

v.

SAMUEL ADAM LAWSON,

Petitioner on Review.

(CC 03CR1469FE; CA A132640; SC S059234 (Control))

STATE OF OREGON,

Respondent on Review,

v.

STANLEY DALE JAMES, JR.,

Petitioner on Review.

(CF080348; CA A140544; SC S059306)
(Consolidated for opinion)

En Banc

On review from the Court of Appeals.*

Argued and submitted November 14, 2011.

Daniel J. Casey, Portland, argued the cause and filed the brief for petitioner on review Samuel Adam Lawson. Ryan T. O'Connor, Senior Deputy Public Defender, Office of Public Defense Services, Salem, argued the cause for petitioner on review Stanley Dale James, Jr. With him on the brief was Peter Gartlan, Chief Defender.

Anna Marie Joyce, Solicitor General, Salem, argued the cause for respondent on review. With her on the brief were John R. Kroger, Attorney General, and Andrew M. Lavin, Assistant Attorney General.

Ramon A. Pagan, Janet Hoffman & Associates, LLC, Portland, filed a brief on behalf of *amicus curiae* Oregon Criminal Defense Lawyers Association.

Matthew G. McHenry, Levine & McHenry LLC, Portland, filed a brief on behalf of *amicus curiae* The Innocence Network.

Marc Sussman, Marc Sussman, P.C., Portland, filed a brief on behalf of *amicus curiae* College and University Professors Solomon Fulero *et al*.

Margaret Garvin and Sarah LeClair, Portland, filed a brief on behalf of *amicus curiae* National Crime Victim Law Institute.

DE MUNIZ, J.

The decision of the Court of Appeals and the judgment of the circuit court in *State v. Lawson* are reversed and the case is remanded for a new trial. The decision of the Court of Appeals in *State v. James* is affirmed.

*Appeal from Douglas County Circuit Court, Ronald Poole, Judge. 239 Or App 363, 244 P3d 860 (2010).

*Appeal from Umatilla County Circuit Court, Thomas W. Kolberg, Judge. 240 Or App 324, 245 P3d 705 (2011).

DE MUNIZ, J.

In these two criminal cases consolidated for purposes of opinion, each defendant's conviction was based, for the most part, on eyewitness identification evidence. In *State v. Lawson*, 239 Or App 363, 244 P3d 860 (2010), the Court of Appeals concluded that, despite the state's use of unduly suggestive pretrial identification procedures, under the test first articulated by this court in *State v. Classen*, 285 Or 221, 590 P2d 1198 (1979), the victim's identification of defendant Lawson had been reliable enough to allow the jury to consider it in its deliberations. In *State v. James*, 240 Or App 324, 245 P3d 705 (2011) -- again relying on *Classen* -- the Court of Appeals similarly concluded that, although the witnesses had been subject to an unduly suggestive police procedure in the course of identifying defendant James, those identifications had nevertheless been sufficiently reliable, and were therefore admissible at trial.

In the 30-plus years since *Classen* was decided, there have been considerable developments in both the law and the science on which this court previously relied in determining the admissibility of eyewitness identification evidence. We allowed review in each of these cases to determine whether the *Classen* test is consistent with the current scientific research and understanding of eyewitness identification. In light of the scientific research, which we discuss below, we now revise the test set out in *Classen* and adopt several additional procedures, based generally on applicable provisions of the Oregon Evidence Code (OEC), for determining the admissibility of eyewitness identification evidence.

I. FACTS

A. *State v. Lawson*

On August 21, 2003, Noris and Sherl Hilde embarked on a weekend camping trip in the Umpqua National Forest, driving to a location where Mr. Hilde had pitched a tent the weekend before to claim the campsite. When they arrived at the campsite with their trailer, they found defendant's yellow truck in their parking space and discovered that defendant had moved into their tent. When Mr. Hilde told defendant that it was their tent, defendant apologized and told them that he thought that it had been abandoned. Defendant gathered his gear, loaded it into his truck, and moved to a vacant campsite nearby, where he stayed in view of the Hildes for about 40 minutes before leaving the area. According to Mrs. Hilde's later recollections, defendant had been wearing a dark or black shirt and a black hat with white lettering.

Later that evening, at approximately 10:00 p.m., Mrs. Hilde was shot in the chest with a large caliber hunting rifle as she stood at the window of the trailer. Mr. Hilde called 9-1-1, but was shot while speaking with the 9-1-1 operator, and he died shortly thereafter. The 9-1-1 dispatcher called back and spoke with Mrs. Hilde, who told the dispatcher that she and her husband had been shot, that she did not know who shot them, and that "they" -- referring to the shooter or shooters -- had wanted the Hildes' truck. When emergency personnel arrived, they found Mrs. Hilde lying in the trailer, critically wounded but conscious. Mrs. Hilde was transported out of the camp and transferred to an ambulance at the highway and then to a helicopter, which flew her to a hospital in Bend. An ambulance attendant testified that Mrs. Hilde was rambling and

hysterical while en route to the hospital. According to the testimony of various ambulance and medical personnel, Mrs. Hilde continued to refer to the perpetrator as "they," and stated alternately at various times that the shooter was the man who had been at their campsite earlier in the day, that the pilot of the helicopter was the shooter, and that she did not know who the perpetrator was and had not seen "their" face or faces. Mrs. Hilde was near death when she arrived at the hospital, and immediately went into surgery.

The second day after the shooting, August 23, 2003, a police detective attempted to interview Mrs. Hilde in the hospital. Mrs. Hilde was heavily medicated and sedated, and could not speak due to a breathing tube in her throat. Her hands had been restrained to prevent her from attempting to remove the tube or other lines, and she could respond to questions only by nodding or shaking her head. The detective first showed Mrs. Hilde a black-and-white photo lineup that included a picture of defendant, who had come to the attention of police after he volunteered to the police that he had encountered the Hildes at their campsite on the morning of the day they were shot. When the detective asked whether she saw in the lineup the person who shot her, Mrs. Hilde shook her head no. The detective then, using leading questions, asked Mrs. Hilde whether she had seen the person who shot her earlier in the day, whether he had been in their tent, and whether he drove a yellow truck. Mrs. Hilde nodded "yes" in response to those questions.

The police again attempted to interview Mrs. Hilde approximately two weeks later, on September 3, 2003. Mrs. Hilde was still in the hospital and still

medicated and in fragile condition, but she could speak. She told detectives that after her husband was shot, the perpetrator had entered the trailer and put a pillow over her face. She said that she did not know who he was, and that she could not see the man because it was dark and because of the pillow. She was apologetic that she was unable to help the police more and did not think she could identify anyone.

Approximately one month after the incident, on September 22, 2003, the police again interviewed Mrs. Hilde. At that interview, Mrs. Hilde told the detectives that, notwithstanding the pillow over her face, she had briefly seen the man who came to her trailer after the shootings. However, she was again unable to pick defendant's photograph out of a lineup. She said that the perpetrator was wearing a dark shirt and a baseball cap, but did not tell police that it was the same man that she and Mr. Hilde had encountered at their campsite earlier that day.

The police interviewed Mrs. Hilde again a week later, on October 1, 2003. At the outset of that interview, one of the detectives and Mrs. Hilde reviewed her answers to the leading questions that she had been asked at the first interview. Mrs. Hilde had no recollection of that interview. Mrs. Hilde nevertheless told the detectives that she now believed that the perpetrator was the man who had been in their camp earlier in the day. However, she "could not swear" it was him, because she claimed to have seen his face only in profile. Mrs. Hilde declined to view a profile lineup, telling the detective that she did not think she would be able to pick her attacker out of the lineup. The detectives then informed Mrs. Hilde that "the man that you've identified is the person that we have in custody," and identified defendant Samuel Lawson by name.

Some time later, a worker at the rehabilitation facility where Mrs. Hilde was convalescing showed her a newspaper photograph of defendant with a caption that identified him as the suspect who had been arrested for the shootings. Approximately one month before defendant's trial -- two years after the shootings, and unbeknownst to defendant and his lawyers -- police investigators exposed Mrs. Hilde to defendant's likeness several more times. On one occasion, the investigating detective showed Mrs. Hilde a single photograph of defendant wearing a dark shirt and a dark hat with white lettering. On another, the detective took Mrs. Hilde to the courthouse, where she personally observed defendant during a pretrial hearing. Later that day, in the detective's office, Mrs. Hilde inadvertently came across one of the earlier photo lineups she had viewed without successfully identifying a suspect from the various photographs. She was then able to pick defendant's picture out of the lineup.[1]

At trial, Mrs. Hilde identified defendant as the man who had shot both her and her husband. She testified that, following the shootings, she had heard the perpetrator approaching the trailer. Afraid that the perpetrator would kill her if she saw him, she looked away from the door. She testified that the perpetrator had put a cushion over her face and demanded the keys to the Hildes' truck. She then testified that he

[1] The record clearly shows that the state failed to disclose to defense counsel that Mrs. Hilde was shown a second (or third) photographic lineup, that a detective took Mrs. Hilde to court to view defendant in person prior to trial, and that Mrs. Hilde was given a single photograph of defendant in the same clothes he wore the morning of the shooting. That kind of information is essential to an accurate determination of the reliability of an eyewitness's identification and is the kind of potentially exculpatory evidence that the state is constitutionally required to disclose to a defendant.

walked away, presumably to look for the truck keys. Accordingly to Mrs. Hilde, when he came back, she turned her head to look at him from under the cushion and recognized him as the man who had been in their camp earlier. When asked whether she had any doubt as to her identification, Mrs. Hilde responded: "Absolutely not. I'll never forget his face as long as I live." She later added that she "always knew it was him."

Defendant moved to strike that identification on the ground that it had been tainted by suggestive police procedures. The trial court denied defendant's motion, finding that Mrs. Hilde had had significant opportunity to observe defendant in the campground on the day of the crime, and in doing so, had noted his demeanor, his "loping" walk, and that he was wearing a dark shirt and black cap with white lettering. Having found that Mrs. Hilde's in-court identification was based on her personal observations, the trial court went on to state that, under the circumstances, the reliability and probative value of that identification were questions for the jury. Ultimately, the jury convicted defendant on five counts of aggravated murder, three counts of attempted aggravated murder, and two counts of first-degree robbery.

Defendant appealed that judgment, arguing in part that Mrs. Hilde should not have been permitted to identify defendant in court because police officers had used "unduly suggestive" identification procedures prior to defendant's trial. To address that issue, the Court of Appeals relied on the two-step procedure first articulated by this court in *State v. Classen*. Under *Classen*, the Court of Appeals first was required to determine whether the underlying identification process had either been suggestive or had otherwise departed needlessly from the procedures designed to avoid such suggestiveness. If the

court determined that the process had been suggestive, then the court was required to determine (1) whether the witness had based the identification at issue on an independent source separate from the suggestive elements, or (2) whether other aspects of the identification substantially excluded the risk that it had been influenced by the suggestive elements. *See Classen*, 285 Or at 232 (describing two-step process). To aid in the second step of that process, *Classen* identified a set of nonexclusive considerations to be used in determining whether an identification had a source independent of the otherwise suggestive procedure. Those factors included:

- The opportunity that the witness had to clearly view the persons involved in the crime and the attention that he or she gave to their identifying features.

- The timing and completeness of the description given by the witness after the event.

- The degree of certainty expressed by the witness in describing the persons involved in the crime and making subsequent identifications.

- The lapse of time between the original observation and the subsequent identification.

Id. at 232-33.

The Court of Appeals concluded that the process leading to Mrs. Hilde's identification of defendant had, indeed, been suggestive. Weighing the factors set out in *Classen*, it nevertheless held that, under the totality of the circumstances, her identification of defendant had been independent of the suggestive procedures. As a result, the Court of Appeals concluded that the trial court had correctly determined that the reliability of Mrs. Hilde's identification of defendant was a question properly left to the jury.

B. *State v. James*

Shortly before 11:00 on a December morning in 2006, Pendleton Police Officer Gomez responded to a theft complaint at a local Safeway store. The thieves had left before Officer Gomez arrived, but Officer Gomez interviewed store employees and obtained descriptions of the two suspects, which he memorialized in an incident report filed later that day. According to one store clerk, while walking down an aisle in the store, he had heard the "clanging" of bottles and then came upon two men, a "large Indian" and a "small Indian," stuffing 40-ounce bottles of beer into a backpack. The clerk went to alert the assistant manager, pointing the pair out to him as they were leaving the store. The two Safeway employees pursued the two perpetrators, yelling for them to stop. The smaller man exited the store and waited outside while the larger man turned to the employees and, blocking the door, prevented them from pursuing the smaller man. According to the store clerk, when he tried to push past the larger man, the larger man "went after" the clerk, "got in his face," and pushed him back. The larger man also attempted to punch the clerk but missed, striking the assistant manager instead. The employees then retreated, and the two suspects ran across the parking lot, got into a gray van, and drove away.

When Officer Gomez arrived at the crime scene, the clerk and the assistant manager related the incident set out above, describing the two thieves as a large male and a small male, both Native American, and both in their mid-20s. According to the Safeway employees, the larger suspect was between six feet and six feet two inches tall, weighed approximately 220 pounds, and wore a white tank top and baggy blue jeans.

The smaller suspect, they said, was approximately five feet tall, weighed about 110 pounds, and wore a long black coat with a hood, baggy blue pants, and a backpack. Although there were surveillance cameras in the store, the employees informed Officer Gomez that none of the cameras worked.

Later that day, Officer Gomez observed two men at a nearby fast food restaurant that he believed matched the descriptions given earlier by the Safeway store employees. The taller of the men was defendant James; the shorter man was Manuel Guerrero. Both men appeared to be inebriated. Officer Gomez approached the two men and questioned them about the incident at Safeway. Both men denied having been to Safeway or having driven a motor vehicle at any time that day. With Guerrero's consent, Officer Gomez searched Guerrero's backpack and discovered one unopened 40-ounce bottle of Steel Reserve 211 malt liquor and a denim jacket, which defendant put on. Officer Gomez asked defendant and Guerrero if they would be willing to go to the Safeway with him to "clear the matter up." Both men consented and were handcuffed and driven to the Safeway store. A second officer, who had come to assist Officer Gomez, drove ahead to prepare for the pending identification. When Officer Gomez arrived at the Safeway just after 4:00 p.m., the clerk and the assistant manager were walking out of the store with the second officer.[2] As the employees approached, Guerrero stood handcuffed by the police cars while defendant remained seated in the

[2] Nothing in the record reflects what the other officer said to the Safeway employees in advance of the identification. That officer was not called to testify at the suppression hearing or at trial.

back seat of one of the cars with the door open; his hands were cuffed behind his back and he was wearing his denim jacket and a pair of sunglasses. Officer Gomez's report contained no details regarding the identification process, stating only that the employees "both positively identified the subjects as the persons who stole the beer." However, at defendant's suppression hearing nearly two years later, Officer Gomez testified that he had asked the employees something like, "Is this them?," after which the two employees "walked right up" to Guerrero and then looked in through the open car door at defendant, "immediately" identifying both men as the perpetrators of the earlier theft.

In August 2008, defendant was charged with second-degree robbery, fourth-degree assault, carrying a concealed weapon, harassment, and third-degree theft. Before trial, defendant filed a motion to suppress both the out-of-court identification and any in-court eyewitness identification that might be made by the employees, arguing that the identification procedure in the Safeway parking lot was unduly suggestive and unreliable, violating federal due process protections and this court's ruling in *Classen*. At the suppression hearing, Officer Gomez testified that, when he first spoke to the store employees, they were "pretty adamant" that they would be able to identify the perpetrators, noting that the pair were "funny looking because [one perpetrator] was so big and [the other] was so small, and so by clothing, size." Officer Gomez described the circumstances of the identification as follows:

> "I took Mr. Guraro [*sic*] out of the car. Officer Byram at the time had went ahead of me to Safeway to have [the employees] meet us outside. I pulled to the front of the store. As I was exiting Mr. Guraro [*sic*], I had him out of the car; both [of the employees] walked up to my patrol car and identified Guraro [*sic*] immediately, that's him. Looked in the backseat,

> that's him, and identified both of them as being the persons who stole the beer and assaulted them."

Officer Gomez testified further that he had photographed each suspect shortly after the identification, and he identified two photographs entered into evidence as the pictures he had taken. The photograph of defendant showed defendant with a moustache and a small goatee, wearing baggy blue jeans with several red bandanas hanging down from the beltline, a white tank top, a blue denim jacket, and sunglasses. The other photograph showed Guerrero wearing black pants, a black hooded sweatshirt, and a white T-shirt.

Defendant argued that the showup identification procedure was unduly suggestive, noting that defendant and Guerrero were the only suspects presented to the witnesses, the second officer may have prompted the witnesses prior to their identification, and that defendant was presented in handcuffs, in the back seat of a police car, wearing sunglasses that obscured his facial features. Moreover, defendant contended that, given the suggestiveness of the process, there was insufficient indicia of reliability to substantially exclude the risk of misidentification, pointing out that (1) Native Americans make up a large portion of the Pendleton community, which borders a reservation; and (2) the witnesses' description of the perpetrators was vague, focusing on generic items of clothing, and omitting key details like the red bandanas hanging from defendant's beltline and defendant's hair color, hairstyle, and facial hair.

Applying the two-part process set out in *State v. Classen*, the trial court denied defendant's motion to suppress the identifications. The trial court found that the identification procedure was, indeed, suggestive under the first part of the *Classen*

inquiry:

> "First, the Defendants were cuffed and in police custody. Second, only [Mr. Guerrero] was actually taken from the vehicle. * * * Defendant, Mr. James, remained in the car. And his appearance was thereby limited to a degree by the observing witnesses. Third, the State produced no evidence as to what the witnesses were told before the show-up."

The court nevertheless concluded that the identification had been based on sources independent of the suggestive procedures:

> "First, the two witnesses got a very good look at the Defendants, and in particular Defendant James. The witnesses indicated they were confident they could identify the Defendant if they saw him again. And this is reasonable in light of the fact that they actually got into a physical confrontation with this Defendant, Mr. James, including the witnesses being shoved and one witness being struck in the face by the suspect, Mr. James.
>
> "Secondly, the witnesses gave Officer Gomez a very good description of the suspects. One was quite large. One was quite small. They both appeared to be Indian. Their clothes were identified to considerable specificity. They indicated that the witnesses [*sic*], when they left, had stolen beer of an unusual size; 40-ounce bottles, and unusual brands, at least in this Court's experience.
>
> "One particular was mentioned as Steel Reserve 211. These were in a backpack. They indicated the Defendant James was wearing a white tank top. And the Court heard evidence that this was in mid-December and that is very unusual wear in December in Pendleton in that Pendleton is known to be quite cold.
>
> "Third, five hours later when Officer Gomez had contact with the Defendants on an unrelated item, he immediately knew that the Defendants were likely to be suspects in the incident at the local Safeway store. Officer Gomez then found a bottle of beer, a 40-ounce bottle of beer [of] the correct brand, Steel Reserve 211[,] in a backpack that was in the possession of the Defendants.
>
> "And the Court notes that that backpack had a jacket which the Defendant claimed was his, and in fact put it on, as well as sunglasses which he put on. And fourth, at the show-up confrontation with the witnesses, the witnesses firmly and immediately identified both

Defendants.

> "Therefore, given the totality of the circumstances in this particular case, I am satisfied that the suggestive show-up confrontation did not cause or contribute to the witness's identification of Defendant James. The surrounding circumstances were strong and in place before the show-up identification. Motion to suppress is denied."

Defendant's case was tried to a jury in October 2008. At trial, Officer Gomez and the clerk from the Safeway store described the identification procedure, and the clerk went on to identify defendant as the larger of the two perpetrators. The jury subsequently found defendant guilty of second-degree robbery, harassment, and third-degree theft; the trial court sentenced defendant to a mandatory minimum sentence of 70 months' incarceration. Defendant appealed his conviction, arguing that the identification evidence was unreliable and should have been suppressed. The Court of Appeals affirmed, holding that the identification evidence was properly admitted under *Classen*.

In seeking review, defendant James directly, and the *amici* supporting defendant Lawson's petition for review, both urge this court to revisit *Classen* and with it, the procedures for determining the admissibility of eyewitness identification. Having accepted that invitation, we begin our analysis by examining *Classen* and its legal underpinnings.

II. THE *CLASSEN* TEST

In *State v. Classen*, this court acknowledged that

> "the unreliability of eyewitness identification under suggestive circumstances is widely recognized, and that the procedures used to minimize this unreliability bear on the admissibility of evidence of such identification."

285 Or at 232. Deciding the admissibility of such evidence, this court continued, required a two-step process:

> "As a practical matter, in the context of a motion by a defendant to suppress identification evidence on the ground that it is the product of a suggestive procedure, the decision on its admissibility involves two steps. First, the court must determine whether the process leading to the offered identification was suggestive or needlessly departed from procedures prescribed to avoid such suggestiveness. If so, then the prosecution must satisfy the court that 'the proffered identification has a source independent of the suggestive confrontation' or photographic display, or that other aspects of the identification at the time it was made substantially exclude the risk that it resulted from the suggestive procedure."

Id. (footnote and internal citation omitted).

Classen listed five nonexclusive factors for courts to consider in determining whether an identification had been made independent of suggestive procedures:

> "These [factors] include the opportunity that the witness had at the time to get a clear view of the persons involved in the crime and the attention he or she gave to their identifying features, the timing and completeness of the description given by the witness after the event, the certainty expressed by the witness in that description and in making the subsequent identification, and, of course, the lapse of time between the original observation and the subsequent identification."

Id. at 232-33. *Classen* emphasized, however, that those factors were not intended to be exhaustive:

> "These are not to be taken as a mechanical checklist of 'constitutional' facts. Obviously other facts may also be important, such as the age and sensory acuity of the witness, or a special occupational concern with people's appearance or physical features, or the frequency of his or her contacts with individuals sharing the general characteristics of the person identified[.]"

Id. at 233 (internal citation omitted). The court made it clear that, in considering those

and other potentially relevant factors, "the ultimate issue [is] whether an identification made in a suggestive procedure has nevertheless been demonstrated to be reliable despite that suggestiveness." *Id.* (footnote omitted).

In establishing the two-step process described above -- particularly the factors used in determining whether an identification procedure had been suggestive -- *Classen* relied on the United States Supreme Court's 1977 decision in *Manson v. Brathwaite*, 432 US 98, 97 S Ct 2243, 53 L Ed 2d 140 (1977). In *Manson* -- like *Classen* -- the Court determined that reliability was the linchpin in determinations regarding the admissibility of identification testimony. In *Manson*, however, the Supreme Court articulated that truism as a matter of fundamental fairness under the Due Process Clause of the Fourteenth Amendment. *Classen*, in contrast, was decided as matter of Oregon evidence law, *see State v. Johanesen*, 319 Or 128, 130, 873 P2d 1065 (1994) (so noting), a difference that this court took pains to recognize, pointing out that

> "the Supreme Court does not purport to make the law of evidence for the states. The Court's decisions under the 14th amendment only pronounce constitutional tests which a state's rules of evidence, and their application in a particular case, may not fail; but these decisions assume that there is an applicable state rule in advance of the issue of its constitutionality. The rules governing the admissibility of evidence in state courts are the responsibility of the states before a Supreme Court decision and remain so afterwards, within the constitutional limits laid down in the decision.
>
> "Evidence law has long provided for excluding certain evidence as a class when its questionable reliability vitiates the value of its possible truthfulness in the particular case, apart from any question of constitutional law."

Classen, 285 Or at 226 (citations omitted).

Under the rules of evidence generally in use among the states, relevant

evidence may be excluded at trial if its probative value is substantially outweighed by the danger of unfair prejudice, confusion of the issues, or misleading the jury. *See, e.g.*, OEC 403 (so stating). In *Perry v. New Hampshire*, 565 US ___, ___, 132 S Ct 716, 181 L Ed 2d 694 (2012), the Supreme Court recently recognized that that evidentiary rule is an important safeguard against unreliable eyewitness identification evidence. In the two cases presently before us, each defendant contends that, under *Classen*, the eyewitness identification evidence should not have been admitted at trial. In addressing that question in these cases, we have decided that, in light of the recent scientific research surrounding eyewitness identifications, it is important for this court to revisit and augment the process outlined in *Classen*. We turn to those inquiries.

III. FACTORS KNOWN TO AFFECT THE RELIABILITY OF EYEWITNESS IDENTIFICATION EVIDENCE

Since 1979 -- the year that this court decided *Classen* -- there have been more than 2,000 scientific studies conducted on the reliability of eyewitness identification. *Amici curiae* in these two cases -- particularly the Innocence Network and a group of academics and university professors who have conducted, published, and reviewed a wide range of scientific research on the subject of eyewitness identification -- submitted extensive data and analysis to this court regarding many of those studies.[3]

[3] We have also reviewed the recent opinion of the New Jersey Supreme Court in *New Jersey v. Henderson*, 208 NJ 208, 27 A3d 872 (2011), together with the report of the Special Master engaged in that case to inquire into the factors affecting the reliability of eyewitness identification evidence. Like the two cases here, *Henderson* involved issues concerning eyewitness identification evidence and the process used in New Jersey to ensure the reliability of that evidence. Prior to *Henderson*, that process required defendants to first demonstrate that police procedures had been impermissibly

Based on our extensive review of the current scientific research and literature, we conclude that the scientific knowledge and empirical research concerning eyewitness perception and memory has progressed sufficiently to warrant taking judicial notice of the data contained in those various sources as legislative facts that we may consult for assistance in determining the effectiveness of our existing test for the admission of eyewitness identification evidence. *See State v. O'Key*, 321 Or 285, 309 n 35, 899 P2d 663 (1995) (noting that "[t]he validity of proffered scientific evidence * * * is a question of law" to be determined by judicial notice of legislative facts submitted to the court); *see also State v. Clowe*, 310 Or 686, 692 n 7, 801 P2d 789 (1990) ("Facts utilized by a court to 'help [it] to determine the context of the law and policy and to exercise its judgment or discretion in determining what course of action to take' have been described as judicial notice of legislative facts." (alteration in original)).

The scientific literature generally divides the factors affecting the reliability of eyewitness identifications into two categories: system variables and estimator variables. *System variables* refer to the circumstances surrounding the identification procedure itself that are generally within the control of those administering the procedure. *Estimator variables*, by contrast, generally refer to characteristics of the witness, the alleged perpetrator, and the environmental conditions of the event that cannot be

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suggestive, after which a trial court would weigh the corrupting effect of the identification process against the same reliability factors set out in *Classen*. The factors affecting the reliability of eyewitness identifications that we discuss are similar to those described in *Henderson*. *See Henderson*, 208 NJ at 237-38 (setting out two-step process and describing system and estimator variables affecting the reliability of eyewitness identification evidence).

manipulated or adjusted by state actors. We find that construct useful and employ it here in summarizing the potentially relevant issues that emerge from the scientific research. Our purpose in summarizing the scientific research is to determine whether, in light of that research, the test established in *Classen* adequately ensures the reliability of particular eyewitness identification evidence that has been subjected to suggestive police procedures, and, ultimately, whether a factfinder can properly assess and weigh the reliability of eyewitness identification evidence. In identifying and describing the variables identified in the research, however, we do not seek to enshrine those variables in Oregon substantive law. We recognize that the scientific research is "probabilistic" -- meaning that it cannot demonstrate that any specific witness is right or wrong, reliable or unreliable, in his or her identification. Rather, we believe that it is imperative that law enforcement, the bench, and the bar be informed of the existence of current scientific research and literature regarding the reliability of eyewitness identification because, as an evidentiary matter, the reliability of eyewitness identification is central to a criminal justice system dedicated to the dual principles of accountability and fairness. We also recognize that, although there now exists a large body of scientific research regarding eyewitness identification, the research is ongoing. Therefore, our acknowledgment of the existence of that research in these cases is not intended to preclude any party in a specific case from validating scientific acceptance of further research or from challenging particular aspects of the research described in this opinion.

The following is a list of the system and estimator variables identified in the research, accompanied by a very brief description of each variable. A more complete

description of each variable and a summary of the scientific research reviewed by this court in these cases are set forth in the appendix to this opinion.

A. *System Variables*

1. *Blind Administration*

Ideally, all identification procedures should be conducted by a "blind" administrator -- a person who does not know the identity of the suspect. In police lineup identifications, lineup administrators who know the identity of the suspect can consciously or unconsciously suggest that information to the witness.

2. *Preidentification Instructions*

The likelihood of misidentification is significantly decreased when witnesses are instructed prior to an identification procedure that a suspect may or may not be in the lineup or photo array, and that it is permissible not to identify anyone.

3. *Lineup Construction*

An identification procedure is essentially an informal and unscientific experiment conducted by law enforcement officials to test their hypothesis that a particular suspect is, in fact, the perpetrator that they seek. The known-innocent subjects used as lineup fillers should be selected first on the basis of their physical similarity with the witness's description of the perpetrator; if no description of a particular feature is available, then the lineup fillers should be chosen based on their similarity to the suspect.

4. *Simultaneous versus Sequential Lineups*

In a lineup procedure in which the witness is presented with each individual person or photograph sequentially, the witness is less able to engage in relative judgment,

and thus is less likely to misidentify innocent suspects. In traditional identification procedures, police display a number of persons or photographs simultaneously to an eyewitness. Witnesses permitted to view all the subjects simultaneously have a tendency to make a "relative judgment" -- choosing the person or photograph that most closely resembles the perpetrator from among the other subjects -- as opposed to making an "absolute judgment" -- comparing each subject to their memory of the perpetrator and deciding whether that subject is the perpetrator.

5. *Showups*

A "showup" is a procedure in which police officers present an eyewitness with a single suspect for identification, often (but not necessarily) conducted in the field shortly after a crime has taken place. Police showups are generally regarded as inherently suggestive -- and therefore less reliable than properly administered lineup identifications -- because the witness is always aware of whom police officers have targeted as a suspect. When conducted properly and within a limited time period immediately following an incident, a showup can be as reliable as a lineup. A showup is most likely to be reliable when it occurs immediately after the witness has observed a criminal perpetrator in action because the benefit of a fresh memory outweighs the inherent suggestiveness of the procedure.

6. *Multiple Viewings (Mugshot Exposure, Mugshot Commitment, Source Monitoring Errors, Source Confusion)*

Viewing a suspect multiple times throughout the course of an investigation can adversely affect the reliability of any identification that follows those viewings. The

negative effect of multiple viewings may result from the witness's inability to discern the source of his or her recognition of the suspect, an occurrence referred to as source confusion or a source monitoring error. A similar problem occurs when the police ask a witness to participate in multiple identification procedures. Whether or not the witness selects the suspect in an initial identification procedure, the procedure increases the witness's familiarity with the suspect's face. If the police later present the witness with another lineup in which the same suspect appears, the suspect may tend to stand out or appear familiar to the witness as a result of the prior lineup, especially when the suspect is the only person who appeared in both lineups.

7. *Suggestive Questioning, Cowitness Contamination, and Other Sources of Post-Event Memory Contamination*

The way in which eyewitnesses are questioned or converse about an event can alter their memory of the event. The use of suggestive wording and leading questions tend to result in answers that more closely fit the expectation embedded in the question. Witness memory can become contaminated by external information or assumptions embedded in questions or otherwise communicated to the witness.

8. *Suggestive Feedback and Recording Confidence*

Post-identification confirming feedback tends to falsely inflate witnesses' confidence in the accuracy of their identifications, as well as their recollections concerning the quality of their opportunity to view a perpetrator and an event. Confirming feedback, by definition, takes place after an identification and thus does not affect the result of the identification itself. It can, however, falsely inflate witness

confidence in the reports they tender regarding many of the factors commonly used by courts and jurors to gauge eyewitness reliability. As a result, the danger of confirming feedback lies in its potential to increase the *appearance* of reliability without increasing reliability itself.

B. *Estimator Variables*

1. *Stress*

High levels of stress or fear can have a negative effect on a witness's ability to make accurate identifications.

2. *Witness Attention*

In assessing eyewitness reliability, it is important to consider not only what was within the witness's view, but also on what the witness was actually focusing his or her attention. It is a common misconception that a person's memory operates like a videotape, recording an exact copy of everything the person sees. A person's capacity for processing information is finite, and the more attention paid to one aspect of an event decreases the amount of attention available for other aspects.

3. *Duration of Exposure*

Longer durations of exposure (time spent looking at the perpetrator) generally result in more accurate identifications.

4. *Environmental Viewing Conditions*

The conditions under which an eyewitness observes an event can significantly affect the eyewitness's ability to perceive and remember facts regarding that event. The basic environmental conditions of distance and lighting, combined with any

aspect of the viewing environment -- fog, heavy rain or other weather conditions, cracked or dirty windows, glare, reflection, shadow, or even physical obstructions within the witness's line of sight -- can potentially impair an eyewitness's ability to clearly view an event or a perpetrator.

5. *Witness Characteristics and Condition*

An eyewitness's ability to perceive and remember varies with the witness's physical and mental characteristics. Although different witnesses and fact patterns may implicate different variables, some common variables that affect the ability to perceive and remember include visual acuity, physical and mental condition (illness, injury, intoxication, or fatigue), and age.

6. *Description*

Contrary to a common misconception, there is little correlation between a witness's ability to describe a person and the witness's ability to later identify that person.

7. *Perpetrator Characteristics -- Distinctiveness, Disguise, and Own-Race Bias*

Witnesses are better at remembering and identifying individuals with distinctive features than they are those possessing average features. The use of a disguise negatively affects later identification accuracy. Witnesses are significantly better at identifying members of their own race than those of other races.

8. *Speed of Identification (Response Latency)*

Accurate identifications generally tend to be made faster than inaccurate identifications.

9. *Level of Certainty*

Under most circumstances, witness confidence or certainty is not a good indicator of identification accuracy. Retrospective self-reports of certainty are highly susceptible to suggestive procedures and confirming feedback, a factor that further limits the utility of the certainty variable. Witness certainty, although a poor indicator of identification accuracy in most cases, nevertheless has substantial potential to influence jurors.

10. *Memory Decay (Retention Interval)*

Memory generally decays over time. Decay rates are exponential rather than linear, with the greatest proportion of memory loss occurring shortly after an initial observation, then leveling off over time.

IV. THE RULE IN *CLASSEN* IS INADEQUATE TO ENSURE THAT UNRELIABLE EVIDENCE WILL BE EXCLUDED

When *Classen* was decided 33 years ago there was no statutory evidence code. Therefore, it was necessary for this court to fashion its own evidentiary rule governing the admissibility of identification evidence. *Classen*, 285 Or at 232. The rule in *Classen* was "designed to protect the reliability of the verdict, *i.e.*, to minimize the danger of convicting the innocent on the basis of unreliable identification evidence." *Johanesen*, 319 Or at 134.

In light of the variables identified in the scientific research that we have briefly identified above (and in light of the scientific research and literature we have reviewed, see Appendix at 53), we conclude that the process outlined in *Classen* does not

accomplish its goal of ensuring that only sufficiently reliable identifications are admitted into evidence. Not only are the reliability factors listed in *Classen* -- opportunity to view the alleged perpetrator, attention to identifying features, timing and completeness of description given after the event, certainty of description and identification by witness, and lapse of time between original observation and the subsequent identification -- both incomplete and, at times, inconsistent with modern scientific findings, but the *Classen* inquiry itself is somewhat at odds with its own goals and with current Oregon evidence law.

A. Classen's *Threshold Requirement of Suggestiveness Inhibits Courts from Considering Evidentiary Concerns*

Under the process established in *Classen*, trial courts cannot consider whether an identification is reliable until some evidence of suggestiveness is first introduced. Such a requirement, however, conflates evidentiary principles with due process concerns. A constitutional due process analysis might properly consider suggestiveness as a separate prerequisite to further inquiry because the Due Process Clause is not implicated absent some form of state action, such as the state's use of a suggestive identification procedure. *See Perry*, 132 S Ct at 730 ("[T]he Due Process Clause does not require a preliminary judicial inquiry into reliability of an eyewitness identification when the identification was not procured under unnecessary suggestive circumstances arranged by law enforcement."). As a matter of state evidence law, however, there is no reason to hinder the analysis of eyewitness reliability with purposeless distinctions between suggestiveness and other sources of unreliability.

When a criminal defendant has challenged the admissibility of eyewitness identification evidence by an appropriate pretrial motion, the manner in which *Classen* apportions the burden of proof in identification matters reflects more concern for due process principles than principles of evidence law. In the context of a due process challenge, it is the defendant who generally bears the initial burden of proof because it is the defendant who must allege and must prove a constitutional violation. In evidentiary matters, however, the proponent of the evidence -- in identification matters, usually the state, although not necessarily so -- traditionally bears the initial burden of establishing the admissibility of the proffered evidence. *See* OEC 307 (providing that "[t]he burden of producing evidence as to a particular issue is on the party against whom a finding on the issue would be required in the absence of further evidence"). Although *Classen* purported to announce an evidentiary rule, it nevertheless adopted the same burden structure used in federal due process analysis by requiring a defendant to bear the initial burden of producing some evidence of suggestiveness. A trial court tasked with determining a constitutional claim must necessarily assume that the evidence is otherwise admissible; were it inadmissible on evidentiary grounds, the court would never reach the constitutional question. However, a trial court tasked with considering a question of evidentiary admissibility clearly cannot begin by assuming admissibility. In sum, *Classen*'s burden-of-proof structure improperly requires defendants who have filed pretrial motions to exclude eyewitness identification evidence to first establish that an identification procedure was suggestive, even though the state -- as the administrator of that procedure -- controls the bulk of the evidence in that regard.

B. *Classen's Second-Part Inquiry Fails to Account for the Influence of Suggestion on Evidence of Reliability*

A second problem with the *Classen* test arises from the tendency of trial courts applying the *Classen* factors to rely heavily on the eyewitnesses' self-reports to establish the existence or nonexistence of suggestability factors. However, the current scientific knowledge and understanding regarding the effects of suggestive identification procedures indicates that self-reported evidence of the *Classen* factors can be inflated by the suggestive procedure itself. That fact creates in turn a sort of feedback loop in which self-reports of reliability, which can be exaggerated by suggestiveness, are then used to prove that suggestiveness did not adversely affect the reliability of an identification. That result is contrary to the scientific research establishing that suggestiveness *adversely* affects reliability.

Because of the alterations to memory that suggestiveness can cause, it is incumbent on courts and law enforcement personnel to treat eyewitness memory just as carefully as they would other forms of trace evidence, like DNA, bloodstains, or fingerprints, the evidentiary value of which can be impaired or destroyed by contamination. Like those forms of evidence, once contaminated, a witness's original memory is very difficult to retrieve; it is, however, only the original memory that has any forensic or evidentiary value. In that regard, *Classen*'s second-part analysis correctly identifies the original memory as the sole source of evidentiary value in eyewitness identifications, but fails to recognize the difficulty of attempting to distinguish between

the original memory and the new memory corrupted by later suggestiveness.[4]

V. NEW PROCEDURES FOR DETERMINING THE ADMISSIBILITY OF EYEWITNESS IDENTIFICATION EVIDENCE

As stated earlier, in *Classen*, this court acknowledged that "extensive research and commentary by psychologists and jurists on the dangers of misidentification and ways to minimize them stretches back at least half a century" and "that the unreliability of eyewitness identification under suggestive circumstances is widely recognized." 285 Or at 227, 232. That said, a perfect solution to the problem of misidentification has thus far eluded us, a difficulty that may lie in the fact that, while empirical evidence suggests that a certain percentage of eyewitness identifications are incorrect,[5] we often have no way to determine whether or not a particular eyewitness is accurate in identifying a specific individual. As we previously observed, although the

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[4] The current scientific research emphasizes how difficult it is for either the court or the witness to analytically separate the witness's original memory of the incident from later recollections tainted by suggestiveness. *See, e.g.*, Gary L. Wells & Deah S. Quinlivan, *Suggestive Eyewitness Identification Procedures and the Supreme Court's Reliability Test in Light of Eyewitness Science: 30 Years Later*, 33 Law & Hum Behav 1, 14-15 (2008) (noting that eyewitness experts "do not generally accept the idea that a mistaken identification, whether it arises from a suggestive procedure or not, can somehow be 'erased' or corrected by a subsequent identification test, no matter how 'fair' that subsequent test might be"). Rather, eyewitness researchers generally believe that, "once an eyewitness has mistakenly identified someone, that person 'becomes' the witness' memory and the error will simply repeat itself." *Id.* at 9.

[5] Eyewitness misidentification has contributed to date to 72 percent of the 301 wrongful convictions revealed by DNA evidence. http://www.innocenceproject.org/content/facts_on_postconviction_DNA_exonerations.php (last visited Nov. 16, 2012); *see also* Brandon L. Garrett, *Convicting the Innocent: Where Criminal Prosecutions Go Wrong* 48 (2011) (76 percent of the first 250 convictions overturned due to DNA evidence since 1989 involved eyewitness misidentification).

scientific studies we have reviewed have identified a number of factors that contribute to the likelihood of mistaken identification, nearly all of those factors are probabilistic in nature -- they can indicate only a statistical likelihood of misidentification within a broad population of people studied, not whether any one identification is right or wrong.

Despite those shortcomings, eyewitness evidence can be extremely probative of guilt and, in many cases, may be the only evidence connecting a guilty defendant to a crime. Therefore, we must attempt to strike a proper balance between the utility of that evidence in convicting the guilty and its proclivity, on occasion, to inculpate the innocent.

As described above, over the past 30 years, a voluminous body of scientific knowledge has been developed on the subject of eyewitness identification. In light of the scientific findings discussed above, we conclude that the methodology set out in *Classen* is not adequate to the task of ensuring the reliability of eyewitness identification evidence that has been subjected to suggestive police procedures. Consequently, we now revise the *Classen* test for determining the admissibility of eyewitness identification evidence based on the generally applicable provisions of the OEC.

In fact, this court has already concluded that the admissibility of eyewitness identification evidence offered by the defense, arising from suggestive defense procedures, is appropriately determined under the OEC. In *Johanesen*, 319 Or at 134, the defendant sought to impeach the robbery victim's identification of the defendant by introducing evidence that, in response to a photographic display of pictures of other possible suspects in the robbery, the victim had stated that one of the men in the display

"could be the robber."

The state, arguing against admission of the defense evidence, asserted that the *Classen* test applied to photographic identification evidence offered by the defense for impeachment purposes. This court rejected the state's argument that the *Classen* test applied to identification evidence offered by the defendant. Instead, this court concluded that admissibility of the proffered evidence should be determined under the OEC. Applying the OEC, the court concluded that proffered evidence met the test for relevance under OEC 401, was not barred by OEC 402, but was subject to potential exclusion under OEC 403. With regard to the application of OEC 403, this court made two important observations. First, the court described the judicial function under OEC 403:

> "OEC 403 articulates the judicial power to exclude relevant evidence because of probative dangers or considerations. Relevant evidence may be excluded under OEC 403 only if its persuasive force ('probative value') is substantially outweighed by one or more of the articulated dangers or considerations. This requires that the probative value of the evidence be compared to the articulated reasons for exclusion and permits exclusion only if one or more of those reasons 'substantially outweigh' the probative value. OEC 403 favors admissibility, while concomitantly providing the means of keeping distracting evidence out of the trial."

Johanesen, 319 Or at 136 (footnotes and citation omitted). Second, the court observed that:

> "In making this OEC 403 determination with respect to out-of-court photographic identification evidence offered by a criminal defendant, factors of the kind identified by this court in *State v. Classen*, *supra*, 285 Or at 232-33 are relevant, although, as noted, *Classen* itself is not controlling. These factors include (1) the procedures used to minimize the unreliability of the identification, (2) the opportunity that the identifier had at the time to get a clear view of the person involved in the crime, (3) the attention that the identifier gave to the assailant's features, (4) the timing and completeness of the description given by the identifier after the event, (5)

> the certainty expressed by the identifier about that description, and (6) the lapse of time between the original observation and the subsequent identification. Other facts also may be important, such as (7) the age and sensory acuity of the identifier, (8) the identifier's special occupational concern with people's appearance or physical features, and (9) the frequency of the identifier's contacts with individuals sharing the general characteristics of the person identified."

Id. at 138.

Although none of the OEC's provisions pertain specifically to eyewitness identification evidence,[6] as the court observed in *Johanesen*, those rules nevertheless articulate minimum standards of reliability intended to apply broadly to many types of evidence. With additional guidance regarding the proper application of those general rules, we conclude that the OEC-based procedures set out below will address the majority of concerns that might arise at trial regarding the reliability of eyewitness identification evidence, particularly in those cases involving suggestive pretrial police procedures.

A. *Preliminary Questions of Fact Regarding the Admissibility of Eyewitness Identification Evidence*

When a criminal defendant files a pretrial motion to exclude eyewitness identification evidence,[7] the trial court's determination should be guided by the following

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[6] OEC 801(4)(a)(C), however, exempts from the definition of hearsay, statements "of identification of a person after perceiving the person," as long as the declarant testifies at trial and is subject to cross-examination concerning the statement.

[7] A criminal defendant's motion to suppress/exclude eyewitness evidence should meet the requirements of UTCR 4.060, which provides, in pertinent part:

> "(1) All motions to suppress evidence:
>
> "(a) must make specific reference to any constitutional provision, statute, rule, case or other authority upon which it is based; and

rules of evidences applicable to the issues in a particular case.

Under the OEC, "[a]ll relevant evidence is admissible," unless Oregon law or the federal constitution provide otherwise. OEC 402. Evidence is relevant if it has "any tendency to make the existence of any fact that is of consequence to the determination of the action more probable or less probable than it would be without the evidence." OEC 401. Eyewitness identification evidence will nearly always meet that basic standard for relevance.[8] However, the OEC also contains a number of specific exceptions and conditions to admissibility that can override those general provisions. As we explain in greater detail below, two provisions, OEC 602 and OEC 701, may also be pertinent in establishing the admissibility of eyewitness identification evidence.

1. *Requirement of Personal Knowledge Under OEC 602*

OEC 602 provides that "a witness may not testify to a matter unless evidence is introduced sufficient to support a finding that the witness has personal

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> "(b) must be accompanied by the moving party's brief which must be adequate reasonably to apprise the court and the adverse party of the arguments and authorities relied upon."

[8] In evaluating alleged eyewitness testimony, a trial court should also keep in mind that ORS 44.370 provides:

> "A witness is presumed to speak the truth. This presumption, however, may be overcome by the manner in which the witness testifies, by the character of the testimony of the witness, or by evidence affecting the character or motives of the witness, or by contradictory evidence. Where the trial is by the jury, they are the exclusive judges of the credibility of the witness."

knowledge of the matter." When a criminal defendant raises that kind of evidentiary challenge in a pretrial motion to exclude eyewitness identification evidence, the proponent of the evidence (in that context, the state) must offer evidence showing both that the witness had an adequate opportunity to observe or otherwise personally perceive the facts to which the witness will testify, and did, in fact, observe or perceive them, thereby gaining personal knowledge of the facts. *See* OEC 602 Commentary (1981) ("A party that offers testimony has the burden of establishing that the witness had an opportunity to observe the fact."). The rule expressly permits evidence of personal knowledge to consist of the witness's own testimony. OEC 602.

As the legislative commentary to OEC 602 explains, the purpose of the personal knowledge requirement is to ensure reliability:

> "The 'rule requiring that a witness who testifies to a fact which can be perceived by the senses must have had an opportunity to observe, and must have actually observed the fact' is 'one of the most pervasive manifestations' of the common law's 'insistence upon the most reliable sources of information.' ORE 602 simply codifies that common law requirement."

OEC 602 Commentary (1981) (citation omitted). Although perhaps somewhat counter-intuitive, inquiring into the extent of an eyewitness's personal knowledge -- when raised as an issue in a case -- promotes the reliability of eyewitness evidence just as with any other type of evidence. Indeed, many of the reliability concerns surrounding eyewitness identification evidence stems from the basic premise that eyewitness testimony can be led or prompted by suggestive identification procedures, suggestive questioning, and/or memory contamination from other sources.

2. *Requirements for Admission of Lay Opinion Testimony Under OEC 701*

A statement of identification potentially can be a kind of lay opinion testimony that is based on a number of inferences and assumptions made by the witness regarding his or her perceptions. *See, e.g.*, OEC 701(2) Commentary (1981) (noting that lay opinion testimony "may allow a witness to communicate in shorthand what the witness has perceived -- things such as the speed of an automobile, *the identity of a person*, the appearance of another person, the sound of footsteps, footprints, distance, uncomplicated illness or injury, apparent age, and so forth" (emphasis added)). The ultimate conclusion in an eyewitness identification -- *i.e.*, that a defendant on trial is the same person that the witness saw at the scene -- cannot itself be observed, but rather must be inferred by the witness.

OEC 701 requires that the proponent of lay opinion testimony establish that the proposed testimony is both rationally based on the witness's perceptions and helpful to the trier of fact:

> "If the witness is not testifying as an expert, testimony of the witness in the form of opinions or inferences is limited to those opinions or inferences which are:
>
> "(1) Rationally based on the perception of the witness; and
>
> "(2) Helpful to a clear understanding of testimony of the witness or the determination of a fact in issue."

OEC 701. Unlike OEC 602, OEC 701 does not expressly specify a standard of proof. However, under OEC 104(1), all "[p]reliminary questions concerning the qualification of a person to be a witness, the existence of a privilege or the admissibility of evidence shall

be determined by the court." As we have held previously, that rule requires the proponent of the evidence to establish such facts to the court by a preponderance of the evidence. *State v. Carlson*, 311 Or 201, 209, 808 P2d 1002 (1991).

3. *Identification Must Be Rationally Based on the Witness's Perception*

When a defendant has filed a pretrial motion to exclude eyewitness identification and raises an issue implicating OEC 701, the first part of an OEC 701 inquiry requires that the trial court initially consider what the witness actually perceived (essentially, the OEC 602 inquiry described above), and then determine whether the witness's identification of the defendant was "rationally based" on those perceptions. To satisfy its burden, the proponent of the identification evidence (generally the state) must demonstrate by a preponderance of the evidence that the witness perceived sufficient facts to support an inference of identification and that the identification was, in fact, based on those perceptions.

Initially, the proponent of the evidence must establish that the witness could make a rational inference of identification from the facts that the witness actually perceived. Human facial features will ordinarily be sufficiently distinctive to serve as a rational basis for an inference of identification. Thus, a witness who got a clear look at the perpetrator's face could rationally base a subsequent identification on a comparison of facial features, even if the witness was unable to verbally communicate every specific similarity between the two faces.

Conversely, nonfacial features like race, height, weight, clothing, or hair color, generally lack the level of distinction necessary to permit the witness to identify a

specific person as the person whom the witness saw. If, for example, a witness testified to observing a tall, dark-haired man of medium build from behind as he ran from the scene of the crime, the trial court permissibly could find that the witness had personal knowledge of the height, build, clothing, and hair color of the perpetrator, but no more, and limit the testimony accordingly.

When a witness's perceptions are capable of supporting an inference of identification, but are nevertheless met with competing evidence of an impermissible basis for that inference -- *i.e.*, suggestive police procedures -- an issue of fact arises as to whether the witness's subsequent identification was derived from a permissible or impermissible basis. When there are facts demonstrating that a witness could have relied on something other than his or her own perceptions to identify the defendant, the state -- as the proponent of the identification -- must establish by a preponderance of the evidence that the identification was based on a permissible basis rather than an impermissible one, such as suggestive police procedures.

Because the outcome of that inquiry will turn on a preponderance of the evidence, a trial court need not conclusively determine whether the witness's identification was based on the witness's actual perceptions. Instead, the trial court need only ascertain whether it was more likely that the witness's identification was based on his or her own perceptions than on any other source.

Finally, we note that, although a defendant may choose to present evidence of particular suggestive influences, the burden ultimately rests on the proponent of the evidence (generally the state) to prove that the identification was rationally based on the

witness's perceptions.

4. *Identification Must Be Helpful to the Trier of Fact*

The second aspect of OEC 701 requires the proponent of identification evidence to establish that the identification will be "[h]elpful to a clear understanding of testimony of the witness or the determination of a fact in issue." OEC 701(2). Although we anticipate that that burden will be easily satisfied in nearly all cases, it is conceivable that some statements of identification might not be particularly helpful to a jury. Consider, for example, the witness who observes a masked perpetrator with prominently scarred or tattooed hands. Although those features could be distinctive enough to provide a rational basis for an inference of identification, a jury may be equally capable of making the same inference by comparing the witness's description of those markings to objective evidence of the actual markings on the defendant. In such cases, the witness's opinion that defendant is the perpetrator provides the jury with little, if any, additional useful information. OEC 701 permits lay opinion testimony to be admitted only when the opinion communicates more to the jury than the sum of the witness's describable perceptions.

B. *Exclusion of Unduly Prejudicial, Confusing, Misleading, or Duplicative Evidence Under OEC 403*

When, in response to a criminal defendant's pretrial motion to exclude eyewitness identification evidence, the state as the proponent of that evidence succeeds in establishing that the evidence is not barred by OEC 402, the defendant as the opponent of the evidence assumes the burden of proving that OEC 403 nevertheless requires its

exclusion. *See O'Key*, 321 Or at 320 (OEC 403 generally favors admissibility, "[t]he 'substantially outweighed' phrasing in OEC 403 in effect places the burden on the party seeking exclusion of the evidence"). OEC 403 provides:

> "Although relevant, evidence may be excluded if its probative value is substantially outweighed by the danger of unfair prejudice, confusion of the issues, or misleading the jury, or by considerations of undue delay or needless presentation of cumulative evidence."

When the opponent of the evidence succeeds in that regard, the trial court can either exclude the evidence or fashion a remedy to restore a permissible balance between the probative value of the evidence and the countervailing concerns set out in OEC 403.

1. *Probative Value*

In determining whether eyewitness identification evidence should be excluded under OEC 403 or what intermediate remedies might be appropriate, a trial court must weigh the probative value of that evidence against the dangers and concerns listed in OEC 403. *See O'Key*, 321 Or at 319 ("Relevant evidence may be excluded under OEC 403 only if its persuasive force is substantially outweighed by any of the articulated dangers or considerations alone or in combination."). The trial court's first task in that regard is to determine the probative value of the identification evidence.

Probative value is essentially a measure of the persuasiveness that attaches to a piece of evidence. *See, e.g.*, *id.* at 299 n 14 (noting that probative value concerns the strength of the relationship between the proffered evidence and the proposition sought to be proved). The persuasive force of eyewitness identification testimony is directly linked to its reliability. The more reliable a witness's testimony, the more persuasively it will

establish a particular fact at issue. Conversely, the less reliable a witness's testimony, the less persuasive it will be. Thus, in applying OEC 403 to eyewitness identification issues, trial courts must examine the relative reliability of evidence produced by the parties to determine the probative value of the identification. The more factors -- the presence of system variables alone or in combination with estimator variables -- that weigh against reliability of the identification, the less persuasive the identification evidence will be to prove the fact of identification, and correspondingly, the less probative value that identification will have.

Probative value is not an all-or-nothing proposition, however. Although the initial admissibility requirements for eyewitness identification evidence establish a minimum baseline of reliability, the persuasive power of the evidence that meets that standard may nevertheless vary greatly, and many identifications possessing relatively low probative value may still pass that initial test. Thus, even after finding that the evidence meets the minimum requirements of OEC 602 and 701, trial courts must still conduct a thorough examination of all the pertinent factors in order to determine the probative value of the evidence under OEC 403.

2. *Unfair Prejudice and Other Countervailing Concerns*

After determining the probative value of the identification evidence before it, a trial court must then determine whether the evidence might unfairly prejudice the defendant or invoke the other concerns enumerated in OEC 403. As we have previously held, "'unfair prejudice' * * * means an undue tendency to suggest a decision on an improper basis * * *. [It] describes a situation in which the preferences of the trier of fact

are affected by reasons essentially unrelated to the persuasive power of the evidence to establish a fact of consequence." *State v. Lyons*, 324 Or 256, 280, 924 P2d 802 (1996).

As a discrete evidentiary class, eyewitness identifications subjected to suggestive police procedures are particularly susceptible to concerns of unfair prejudice. Consequently, in cases in which an eyewitness has been exposed to suggestive police procedures, trial courts have a heightened role as an evidentiary gatekeeper because "traditional" methods of testing reliability -- like cross-examination -- can be ineffective at discrediting unreliable or inaccurate eyewitness identification evidence.[9]

C. *Intermediate Remedies*

Under OEC 403, trial courts may exclude particularly prejudicial aspects of a witness's testimony without excluding the identification itself. In essence, a partial exclusion order is no more than a determination under OEC 403 that the prejudicial effect of some testimonial evidence substantially outweighs its probative value. As we have already noted, witnesses' self-appraisal of their certainty regarding identifications they have made, especially when elicited after they have received confirming feedback from suggestive police procedures, is a poor indicator of reliability. At the same time, jurors

[9] In one study testing the effectiveness of cross-examination in exposing inaccurate eyewitnesses, mock jurors watched both accurate and inaccurate eyewitnesses testify and then submit to cross-examination regarding their identification. The jurors believed 80 percent of the accurate eyewitnesses, but also 79.5 percent of the inaccurate eyewitnesses -- evidencing a dangerous inability to distinguish accurate from inaccurate eyewitness testimony, even with the assistance of thorough cross-examination. *See* R.C.L. Lindsey *et al.*, *Can People Detect Eyewitness-Identification Inaccuracy Within and Across Situations?*, 66 J Applied Psychol 79 (1981) (discussing an experiment conducted for another study).

can find such statements persuasive, even when contradicted by more probative indicia of reliability. Accordingly, when such statements are presented at trial, they ordinarily have little probative value, but significant potential for unfair prejudice. Thus, a trial court could admit an eyewitness's identification, but find that the prejudicial effect of the accompanying statement of certainty that was created by suggestive police procedures substantially outweighed its limited probative value. A court presented with such evidence could fashion an order permitting the witness to testify to the identification (*i.e.*, "defendant is the man that I saw rob the bank"), but prohibit testimony regarding the witness's level of certainty (*i.e.*, "I'm 100 percent sure that defendant is the man that I saw rob the bank"). By excluding the particularly prejudicial aspects of an eyewitness's testimony, trial courts may be able to admit other relevant and probative aspects of that testimony, even though the eyewitness's testimony on balance might otherwise have been unduly prejudicial.

D. *Expert Testimony*

As a result of the substantial degree of acceptance within the scientific community concerning data on the reliability of eyewitness identifications, federal and state courts around the country have recognized that traditional methods of informing factfinders of the pitfalls of eyewitness identification -- cross-examination, closing argument, and generalized jury instructions -- frequently are not adequate to inform factfinders of the factors affecting the reliability of such identifications. *See State v. Guilbert*, 306 Conn 218, 49 A3d 705 (2012) (finding that scientific research on the reliability of eyewitness identifications enjoys strong consensus in the scientific

community, that many factors affecting eyewitness identifications are unknown to average jurors or are contrary to common assumptions, and that cross-examination, closing argument, and generalized jury instructions are not effective in helping jurors spot mistaken identifications).[10]

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[10] In *Guibert*, the court compiled the following list of federal and state cases recognizing the scientific community's acceptance of the research regarding the reliability of eyewitness identification and the admission of expert testimony based on that research. We quote that list here.

> "*Ferensic* v. *Birkett*, 501 F3d 469, 482 (6th Cir 2007) ('expert testimony on eyewitness identifications * * * is now universally recognized as scientifically valid and of aid [to] the trier of fact for admissibility purposes'); *United States* v. *Smithers*, 212 F3d 306, 313 (6th Cir 2000) (noting that 'the science of eyewitness perception has achieved the level of exactness, methodology and reliability of any psychological research'); *United States* v. *Moore*, 786 F2d 1308, 1312 (5th Cir 1986) ('This [c]ourt accepts the modern conclusion that the admission of expert testimony regarding eyewitness identifications is proper. * * * We cannot say [that] such scientific data [are] inadequate or contradictory. The scientific validity of the studies confirming the many weaknesses of eyewitness identification cannot be seriously questioned at this point.'); *United States* v. *Downing*, 753 F2d 1224, 1242 (3d Cir 1985) (noting 'the proliferation of empirical research demonstrating the pitfalls of eyewitness identification' and that 'the consistency of the results of these studies is impressive'); *United States* v. *Feliciano*, United States District Court, Docket No. CR-08-0932-01 PHX-DGC (D Ariz Nov 5, 2009) ('[t]he degree of acceptance [of the scientific data on the reliability of eyewitness identifications] within the scientific community . . . is substantial'); *People* v. *McDonald*, 37 Cal 3d 351, 364-65, 690 P.2d 709, 208 Cal Rptr 236 (1984) ('[E]mpirical studies of the psychological factors affecting eyewitness identification have proliferated, and reports of their results have appeared at an ever-accelerating pace in the professional literature of the behavioral and social sciences. * * * The consistency of the results of these studies is impressive, and the courts can no longer remain oblivious to their implications for the administration of justice.'), *overruled in part on other grounds by People* v. *Mendoza*, 23 Cal 4th 896, 4 P3d 265, 98 Cal Rptr 2d 431 (2000); *Brodes* v. *State*, 279 Ga 435, 440-41, 614 SE2d 766 (2005) (scientific validity of research studies concerning unreliability of eyewitness identifications is

Because many of the system and estimator variables that we described earlier are either unknown to the average juror or contrary to common assumptions, expert testimony is one method by which the parties can educate the trier of fact concerning variables that can affect the reliability of eyewitness identification. Expert

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> well established); *State* v. *Henderson*, 208 NJ 208, 218, 27 A3d 872 (2011) (noting that, '[f]rom social science research to the review of actual police lineups, from laboratory experiments to DNA exonerations, [scientific research and studies demonstrate] that the possibility of mistaken identification is real,' that many studies reveal 'a troubling lack of reliability in eyewitness identifications,' and that '[t]hat evidence offers convincing proof that the current test for evaluating the trustworthiness of eyewitness identifications should be revised'); *People* v. *LeGrand*, 8 NY3d 449, 455, 867 NE2d 374, 835 NYS2d 523 (2007) ('[E]xpert psychological testimony on eyewitness identification [is] sufficiently reliable to be admitted, and the vast majority of academic commentators have urged its acceptance . * * * [P]sychological research data [are] by now abundant, and the findings based [on the data] concerning cognitive factors that may affect identification are quite uniform and well documented. * * *'); *State* v. *Copeland*, 226 SW3d 287, 299 (Tenn 2007) ('[s]cientifically tested studies, subject to peer review, have identified legitimate areas of concern' in area of eyewitness identifications); *Tillman* v. *State*, 354 SW3d 425, 441 (Tex Crim App 2011) ('[E]yewitness identification has continued to be troublesome and controversial as the outside world and modern science have cast doubt on this crucial piece of evidence.* * * [A] vast body of scientific research about human memory has emerged. That body of work casts doubt on some commonly held views relating to memory * * *.'); *State* v. *Clopten*, 223 P3d 1103, 1108 (Utah 2009) ('empirical research has convincingly established that expert testimony is necessary in many cases to explain the possibility of mistaken eyewitness identification'); *State* v. *Dubose*, 285 Wis 2d 143, 162, 699 NW2d 582 (2005) ('[o]ver the last decade, there have been extensive studies on the issue of identification evidence')."

State v. Guibert, 306 Conn at 234 n 8 (brackets in original; some citations and internal quotation marks omitted).

testimony may also provide an avenue to introduce and explain scientific research or other indicia of reliability not specifically addressed by our opinion in these cases. In that regard, the use of experts may prove vital to ensuring that the law keeps pace with advances in scientific knowledge, thus enabling judges and jurors to evaluate eyewitness identification testimony according to relevant and meaningful criteria. Of course, expert testimony must be predicated on scientific research; must meet the threshold admissibility requirements for scientific evidence, *see O'Key*, 321 Or at 299-300 (setting out test for the admission of scientific evidence); and must be relevant to a disputed issue in the case, such that the testimony will assist the jury in resolving that issue.

To summarize: Under this revised test governing the admission of eyewitness testimony, when a criminal defendant files a pretrial motion to exclude eyewitness identification evidence, the state as the proponent of the eyewitness identification must establish all preliminary facts necessary to establish admissibility of the eyewitness evidence. *See* OEC 104; OEC 307. When an issue raised in a pretrial challenge to eyewitness identification evidence specifically implicates OEC 602 or OEC 701, those preliminary facts must include, at minimum, proof under OEC 602 that the proffered eyewitness has personal knowledge of the matters to which the witness will testify, and proof under OEC 701 that any identification is both rationally based on the witness's first-hand perceptions and helpful to the trier of fact.

If the state satisfies its burden that eyewitness evidence is not barred by OEC 402, the burden shifts to the defendant to establish under OEC 403 that, although the eyewitness evidence is otherwise admissible, the probative value of the evidence is

substantially outweighed by the danger of unfair prejudice, confusion of the issues, misleading the jury, or by considerations of undue delay or needless presentation of cumulative evidence. If the trial court concludes that the defendant opposing the evidence has succeeded in making that showing, the trial court can either exclude the identification, or fashion an appropriate intermediate remedy short of exclusion to cure the unfair prejudice or other dangers attending the use of that evidence. The decision whether to admit, exclude, or fashion an appropriate intermediate remedy short of exclusion is committed to the sound exercise of the trial court's discretion. *See* *State v. Cunningham*, 337 Or 528, 536, 99 P3d 271 (2004) (question whether relevant evidence should be excluded under OEC 403 because its probative value is substantially outweighed by the danger of unfair prejudice or other factors is reserved to the trial court's discretion).

Although we have revised the *Classen* test to incorporate pertinent rules of evidence, we anticipate that the trial courts will continue to admit most eyewitness identifications. That is so because, although possible, it is doubtful that issues concerning one or more of the estimator variables that we have identified will, without more, be enough to support an inference of unreliability sufficient to justify the exclusion of the eyewitness identification. In that regard, we anticipate that when the facts of a case reveal only issues regarding estimator variables, defendants will not seek a pretrial ruling on the admission of the eyewitness identification. Instead, defendants will likely prefer to probe the issues regarding estimator variables through cross-examination, and to educate the factfinder about the potential effects of relevant estimator variables on the

accuracy of eyewitness identification by using expert testimony and case-specific jury instructions.

If the state's administration of one or more of the system variables (either alone or combined with estimator variables) results in suggestive police procedures, that fact can, in turn, give rise to an inference of unreliability that is sufficient to undermine the perceived accuracy and truthfulness of an eyewitness identification -- only then may a trial court exclude the eyewitness identification under OEC 403.

In the end, we intend the test to be a flexible one that will enable the state to hold offenders accountable and, at the same time, protect a criminal defendant's right to a fair trial.

VI. APPLICATION TO *LAWSON* AND *JAMES*

A. *State v. Lawson*

The record in *Lawson* raises serious concerns regarding the reliability of the identification evidence proffered below. First, as to the estimator variables present in this case, we note that the eyewitness -- Mrs. Hilde -- was under tremendous stress and in poor physical and mental condition when she first observed the man who entered her trailer after she had been shot. She had sustained a critical gunshot wound to the chest, she was unsure whether her husband was alive or dead, and she feared that the perpetrator intended to further harm her or her husband. High levels of stress and fear -- coupled with the debilitating effects of a physical injury such as a bullet wound -- tend to impair a witness's ability to encode information into memory. Second, the environmental viewing conditions were poor. It was dark inside the trailer, and Mrs. Hilde was lying on the floor

when she encountered the perpetrator. The perpetrator covered her face with a pillow shortly after entering the trailer for the specific purpose of obscuring Mrs. Hilde's view of him. Mrs. Hilde claims to have viewed the perpetrator for only a few seconds at most, and only in profile, and she recalled that the perpetrator was wearing a hat when she viewed him, obscuring key identifying features like his hair and hairline. Finally, Mrs. Hilde's in-court identification of defendant Lawson took place over two years after her brief view of the perpetrator. Memory decays over time, and the effects of that memory loss are exacerbated when the initial encoding of the memory is impaired by other variables.

There are a number of system variables at play here as well. Police detectives first interviewed Mrs. Hilde in the hospital where she was heavily medicated and intubated, and could not speak or move her hands. The police questioned her using leading questions that implicitly communicated their belief that defendant was the shooter, to which Mrs. Hilde could respond only by nodding or shaking her head. Due to her fragile physical and mental condition, as well as the circumstances discussed above that impaired her ability to view the perpetrator and encode her observations into memory, Mrs. Hilde would have been especially susceptible to memory contamination from suggestive questioning. Once implanted in her mind, the suggestion that the police believed that the man she saw earlier at their campsite was also the perpetrator could have affected every subsequent attempt she made to recall the event. From that point forward, it would have been extremely difficult for Mrs. Hilde to mentally separate the task of identifying the perpetrator from her brief glimpse of his profile in the dark from

the task of identifying the man she saw earlier in her campsite for about 40 minutes in broad daylight.

Mrs. Hilde, however, was unable to identify defendant as either the perpetrator or the man previously in her campsite until after she had seen defendant or his photograph in suggestive circumstances on several additional occasions. Mrs. Hilde was shown photographic lineups containing defendant's photograph on at least two occasions while she was in the hospital, but was unable to identify defendant in either lineup. It was not until after she had seen a newspaper article with a picture of defendant, and was later brought by police to a preliminary hearing to view defendant in person, that she was able to identify him. Those instances introduce further uncertainty as to whether Mrs. Hilde's identification of defendant was based on her brief initial viewing of the perpetrator, or on the numerous subsequent viewings of defendant under circumstances that were highly suggestive of his guilt.

The alterations in Mrs. Hilde's statements over time are indicative of a memory altered by suggestion and confirming feedback. She initially told the police that she had not seen the perpetrator's face and could not identify him. After a series of leading questions inculpating defendant, she agreed with police that defendant was the perpetrator, but still could not identify him. After several viewings of defendant in person and in photographs, she was able to pick defendant out of a series of photographs. And finally, at trial, over two years after the initial incident, Mrs. Hilde identified defendant as the perpetrator under circumstances comparable to a showup. When asked if she had any doubt as to her identification, Mrs. Hilde said, "[a]bsolutely not. I'll never

forget his face as long as I live," and later added that she "always knew it was him."

In light of current scientific knowledge regarding the effects of suggestion and confirming feedback, the preceding circumstances raise serious questions concerning the reliability of the identification evidence admitted at defendant's trial. In *Lawson*, because the Court of Appeals and trial court relied on the procedures set out in *Classen* -- procedures that we have revised in this opinion -- we reverse and remand the case to the trial court for a new trial. Due to the novelty and complexity of the procedures we have articulated today, the parties must be permitted on retrial to (1) supplement the record with any additional evidence that may bear on the reliability of the eyewitness identifications at issue here, and (2) present arguments regarding the appropriate application of the new procedures set out in this opinion.

B. *State v. James*

In *James*, we conclude that, unlike *Lawson*, application of the revised test that we have established here could not have resulted in the exclusion of the eyewitness identification evidence. Accordingly, we affirm defendant James's conviction. We do so for the following reasons.

Within minutes of the crime, the witnesses provided detailed descriptions to the police that included the race, height, weight, and clothing of both perpetrators. The witnesses initially described one of the perpetrators as "a fairly large guy; Indian male six feet to six feet two inches, 220 pounds, wearing baggy blue jeans, white tank top tee shirt"; the other was a "small guy," an "Indian male," a male approximately "five feet tall, 110 pounds, wearing a black coat with a hood and baggy blue plants, carrying a black

back pack."

Five hours later, the officer who had investigated the Safeway robbery received a report of a disturbance at a local fast food restaurant. When the officer arrived at the restaurant he recognized the men about whom the complaint had been made as "exactly" matching the description of the Safeway robbery suspects. In particular, the officer noted that, although the type of clothing was not unusual, wearing a tank-top T-shirt without a coat in December was unusual, as was the notable difference in height between the two men. The witnesses later confirmed that the men the officer had apprehended were the men they had seen at the store.

We analyze the admissibility of those identifications under the framework we have outlined above. First, we conclude that the OEC requirement of personal knowledge was met. The witnesses were face-to-face with the perpetrators and had clear opportunities to observe their features. Although some estimator variables could have negatively affected the witnesses' perceptions, others indicate that the witnesses' observations were reliable. For instance, although the clerk may have experienced stress when one of the perpetrators tried to punch him, that incident occurred only after the clerk had watched and reported the perpetrator's actions. Both witnesses observed the perpetrators for a lengthy period of time both in, and as they were leaving, the store; the environmental conditions were conducive to their doing so, and the perpetrators were not wearing disguises. Although the perpetrators were of a different race than were the witnesses, they had distinctive features. The trial court may have erred in considering the level of certainty with which the witnesses testified, but no reasonable decisionmaker

could find that the witnesses did not have the personal knowledge necessary to identify the perpetrators.

That is not the end of the inquiry outlined above, however. Because there was evidence that the witnesses' later identification of defendant occurred during a "show up" procedure, and the trial court found that procedure to be unduly suggestive, defendant raised a question of fact as to whether the witnesses' identifications were derived from their initial untainted observations or from that suggestive procedure. The state, as the proponent of the witnesses' identifications was required to establish by a preponderance of the evidence that the witnesses' identifications were based on their original observations.

The trial court evaluated the evidence that the parties proferred on that issue and was "satisfied that the suggestive show up confrontation did not cause or contribute to the witnesses' identification of defendant James." Although the trial court mistakenly considered the witnesses' certainty about their identification in that analysis, the court also carefully considered and explicitly relied on other facts which supported its conclusion. The trial court found that the witnesses "got a very good look" at the perpetrators and described their unique features with particularity. The trial court also found that the witnesses had observed and described the clothing that defendant and his companion were wearing (one item of which was unusual for that location at that time of year) and a specific bottle of beer that was found in defendant's possession along with other items that defendant admitted belonged to him. The witnesses' accuracy in describing those details demonstrated the reliability of their observations. The trial court

did not err in reaching its factual conclusion that the witnesses' identifications of defendant were based on their original observations.

The final issues in our analysis are whether the witnesses' identifications were helpful to the trier of fact and whether OEC 403 required their exclusion. To both of those points, defendant could argue that the witnesses' identification of the men did not provide the jury with information that was any more helpful than their complete descriptions of the perpetrators and that, as a result, its persuasive value was limited and outweighed by the unfair prejudice introduced by the identifications. However, in this case, we think that the concerns of unfair prejudice were negligible. The descriptions of defendant and his companion so closely matched the two men apprehended by police, that the witnesses' subsequent identifications of defendant as one of the men that they had seen in the store prejudiced defendant little, if at all. We conclude that the trial court did not err in admitting the witnesses' identifications of defendant.[11]

The decision of the Court of Appeals and the judgment of the circuit court in *State v. Lawson* are reversed and the case is remanded for a new trial. The decision of the Court of Appeals in *State v. James* is affirmed.

[11] For the reasons described above, we also conclude that the witnesses' in-court identification of defendant also satisfied the Due Process Clause.

APPENDIX

Set out below is a summary of the scientific research and literature this court examined for these cases, organized according to the categories of variables -- estimator and system -- identified in that body of work. As described in our opinion, estimator variables generally refer to characteristics of the witness, the perpetrator, and the environmental conditions of the event that cannot be manipulated or adjusted by state actors. In contrast, system variables refer to the circumstances of the identification procedure itself that generally are within the control of those administering the procedure.

I. ESTIMATOR VARIABLES

A. *Stress*

High levels of stress or fear can have a negative effect on a witness's ability to make accurate identifications. Although moderate amounts of stress may improve focus in some circumstances, research shows that high levels of stress significantly impair a witness's ability to recognize faces and encode details into memory. *See* Charles A. Morgan III *et al.*, *Accuracy of Eyewitness Memory for Persons Encountered During Exposure to Highly Intense Stress*, 27 Int'l J L & Psychiatry 265, 275-76 (2004) (so stating). When under high amounts of stress, witnesses are often unable to remember particular details -- like facial features or clothing – that are not immediately relevant to the basic survival response triggered by adrenaline and other hormones that are released in highly stressful situations. *Id.*

A meta-analysis[12] of 27 independent studies conducted on the effects of stress on identification accuracy showed that, while 59 percent of the 1,727 participants correctly identified the target individual in a target-present lineup after a low-stress encounter, only 39 percent did so after high-stress encounters. Kenneth A. Deffenbacher *et al.*, *A Meta-Analytic Review of the Effects of High Stress on Eyewitness Memory*, 28 Law & Hum Behav 687 (2004). In another study, military survival school participants were subjected to two 40-minute interrogations, each by different interrogators, following a 12-hour period of confinement without food and sleep in a mock prisoner of war camp. Morgan, *Accuracy of Eyewitness Memory*, 27 Int'l J L & Psychiatry 265 (2004). One interrogation was conducted under high-stress conditions, involving physical confrontation, while the other was conducted under low-stress conditions, involving only deceptive questioning. *Id.* When asked the next day to identify their interrogators, only 30 percent of the participants correctly identified their high-stress interrogator, while 60 percent correctly identified their low-stress interrogator. *Id.* The study also noted an associated increase in false identifications -- 56 percent of the participants falsely identified another person as their high-stress interrogator, compared to 38 percent who

[12] A meta-analysis is a type of study in which researchers combine and analyze the results of multiple previously published studies on a certain subject in order to evaluate their cumulative findings in a broader context, and over larger sample sizes. Meta-analyses do not involve conducting any new experiments, but are nevertheless highly regarded in the scientific community for their ability to synthesize a large amount of data and illustrate a general consensus in a particular field. *See* Roy S. Malpass *et al.*, *The Need for Expert Psychological Testimony on Eyewitness Identification*, in Expert Testimony on the Psychology of Eyewitness Identification 14 (B. Cutler ed., 2009) (describing utility of meta-analytic studies).

did so with regard to their low-stress interrogator. *Id.*

The negative effect of stress on the reliability of eyewitness identifications contradicts a common misconception that faces seen in highly stressful situations can be "burned into" a witness's memory. Consequently, the amount of stress inflicted on an eyewitness has the potential to impair a jury's ability to fairly and accurately weigh reliability, because jurors may incorrectly assume that stress *increases* reliability. In addition, stress may also interact with other factors to compound unreliability. Studies demonstrate, for example, that witnesses are more likely to overestimate short durations of time in high-stress situations than in low-stress situations. *See* Elizabeth F. Loftus *et al.*, *Time Went by so Slowly: Overestimation of Event Duration by Males and Females*, 1 Applied Cognitive Psychol 3 (1987) (so stating).

B. *Witness Attention*

In assessing eyewitness reliability, it is important to consider not only what was within the witness's view, but also on what the witness was actually focusing his or her attention. It is a common misconception that a person's memory operates like a videotape, recording an exact copy of everything the person sees. Studies show, however, that memory in fact works much differently. A person's capacity for processing information is finite, and the more attention paid to one aspect of an event decreases the amount of attention available for other aspects. Gary L. Wells & Deah S. Quinlivan, *Suggestive Eyewitness Identification Procedures and the Supreme Court's Reliability Test in Light of Eyewitness Science: 30 Years Later*, 33 Law & Hum Behav 1, 10-11 (2009).

One commonly encountered example of that fact is the weapon-focus

effect. Studies consistently show that the visible presence of a weapon during an encounter negatively affects memory for faces and identification accuracy because witnesses tend to focus their attention on the weapon instead of on the face or appearance of the perpetrator, or on other details of the encounter. *See, e.g.*, Kerri L. Pickel, *Remembering and Identifying Menacing Perpetrators: Exposure to Violence and the Weapon Focus Effect*, in 2 The Handbook of Eyewitness Psychology: Memory for People 339 (R.C.L. Lindsay *et al.* eds., 2007). That diminished attention factor frequently impairs the witness's ability to encode things such as facial details into memory, resulting in decreased accuracy in later identifications. Although the weapon-focus effect is perhaps the most well-documented illustration regarding the effects of witness distraction, some studies indicate that the effect is not limited to dangerous or threatening objects but, in fact, extends to any object that attracts the witness's attention by virtue of being unusual or out of place in the context in which it is encountered. *See Id.* at 353-54 (discussing experiments involving unusual rather than threatening items). Studies have documented similar impairment of identification performance when witnesses viewed the target holding unusual, but nonthreatening, objects like a stalk of celery or a toy doll. *Id.*

The negative effect of weapon-focus on identification accuracy may be magnified when combined with stress, short exposure times, poor viewing conditions, or longer retention intervals,[13] and may also result in less accurate initial descriptions of the perpetrator. *Id.*; Nancy Mehrkens Steblay, *A Meta-Analytic Review of the Weapon Focus*

[13] The term "retention interval" refers to the duration of time between the witness's initial observation of the perpetrator and the identification event.

Effect, 16 Law & Hum Behav 413, 417 (1992). In addition, evidence regarding a witness's attention is particularly susceptible to the inflating effects of confirming feedback. Studies demonstrate that witnesses generally do not contemporaneously observe their own degree of attention or other viewing conditions as they observe an event. Gary L. Wells, *"Good, You Identified the Suspect": Feedback to Eyewitnesses Distorts Their Reports of the Witnessing Experience*, 83 J Applied Psychol 360 (1998). Thus, when asked later how closely they were paying attention, witnesses may rely more heavily on external context clues -- like confirming feedback -- than on independent recollection.

C. *Duration of Exposure*

Scientific studies indicate that longer durations of exposure (time spent looking at the perpetrator) generally result in more accurate identifications. Brian H. Bornstein *et al.*, *Effects of Exposure Time and Cognitive Operations on Facial Identification Accuracy: A Meta-Analysis of Two Variables Associated with Initial Memory Strength*, 18 Psychology, Crime & Law 473 (2012). One meta-analysis shows that the beneficial effect of longer exposure time on accuracy is greatest between the shortest durations, up to approximately 30 seconds. *Id.* In contrast, for durations over 30 seconds, only substantial increases in exposure time produced marked improvement in witness performance. *Id.* However, it is impossible to determine conclusively that any particular duration of exposure is too short to make an accurate identification, nor so long as to entirely eliminate the possibility of a mistaken identification. Indeed, at least one study has noted *decreases* in identification accuracy with longer viewing durations, in

cases where the appearance of the person to be identified has changed significantly between the identification and the initial viewing. J. Don Read *et al.*, *Changing Photos of Faces: Effects of Exposure Duration and Photo Similarity on Recognition and the Accuracy-Confidence Relationship*, 16 Experimental Psychol: Learning, Memory, and Cognition 870 (Sept 1990).

Studies also show that witnesses consistently and significantly overestimate short durations of time (generally, durations of 20 minutes or less), especially during highly stimulating, stressful, or unfamiliar events. Loftus, *Time Went by so Slowly*, 1 Applied Cognitive Psychol 3; A. Daniel Yarmey, *Retrospective Duration Estimations for Variant and Invariant Events in Field Situations*, 14 Applied Cognitive Psychol 45 (2000).

D. *Environmental Viewing Conditions*

The conditions under which an eyewitness observes an event can significantly affect the eyewitness's ability to perceive and remember facts regarding that event. Although we limit our discussion here to the basic environmental conditions of distance and lighting, we have already noted that any aspect of a viewing environment can potentially impair an eyewitness's ability to clearly view an event or a perpetrator.

Unsurprisingly, studies confirm that visual perception decreases with either distance or diminished lighting. In the case of distance, unlike variables subject to probability determinations, scientists have identified certain dispositive endpoints beyond which humans with normal, unaided vision are physically incapable of discerning facial features. Studies also show that witnesses who receive post-identification feedback

confirming the validity of their identification tend to report more favorable initial viewing conditions than witnesses who do not receive such feedback. Wells, *et al., "Good, You Identified the Suspect": Feedback to Eyewitnesses Distorts their Reports of the Witnessing Experience,* 83 Applied Psychol 360 (1998).

E. *Witness Characteristics and Condition*

An eyewitness's ability to perceive and remember varies with the witness's physical and mental characteristics. Although different witnesses and fact patterns may implicate different variables, some common variables that affect the ability to perceive and remember include visual acuity, physical and mental condition (illness, injury, intoxication, or fatigue), and age. Studies demonstrate, for example, that intoxicated witnesses are more likely to misidentify an innocent suspect than their sober counterparts. *See* Jennifer E. Dysart *et al., The Intoxicated Witness: Effects of Alcohol on Identification Accuracy from Showups*, 87 J Applied Psychol 170 (2002) (finding that 78 percent of participants with blood alcohol levels less than .04 percent correctly rejected a showup where the perpetrator was absent, while only 48 percent of participants with higher blood alcohol levels -- averaging .09 percent -- did so).

Age can also significantly affect the reliability of a witness's identification, memory, and perception. Studies show that children and elderly witnesses are generally less likely to make accurate identifications than adults, especially in target-absent conditions. Gary L. Wells & Elizabeth A. Olson, *Eyewitness Testimony*, 54 Ann Rev Psychol 277, 280 (2003).

F. *Description*

Contrary to a common belief, studies reveal that there is little correlation between a witness's ability to describe a person and the witness's ability to later identify that person. Christian A. Meissner *et al.*, *Person Descriptions as Eyewitness Evidence*, in 2 The Handbook of Eyewitness Psychology: Memory for People 3 (R.C.L. Lindsay *et al.*, eds., 2007). Indeed, some studies show a negative effect on identification accuracy after witnesses have attempted to produce a composite of a suspect or provide detailed verbal descriptions of facial features, a development that might result from the different cognitive mechanisms employed to verbally describe faces as opposed to recognizing them. *Id.* Other studies indicate that witnesses who focus on memorizing particular facial features at a viewing rather than on the face as a whole may be able to better describe those features, but tend to perform less accurately in later identification procedures. *Id.*

G. *Perpetrator Characteristics -- Distinctiveness, Disguise, and Own-Race Bias*

Witnesses are better at remembering and identifying individuals with distinctive features than they are those possessing average features. *See* Peter N. Shapiro & Steven Penrod, *Meta-Analysis of Facial Identification Studies*, 100 Psychol Bull 139 (1986) (summarizing results of a number of studies on target distinctiveness). However, identification accuracy drops significantly when an individual's facial features have changed since the witness's initial observation. K.E. Patterson & A.D. Baddeley, *When Face Recognition Fails*, 3 Experimental Psychol 406, 410 (1977) (finding that recognition performance dropped by over 50 percent when researchers manipulated the

target's facial appearance after the initial opportunity to view by changing hairstyles or adding or removing facial hair). Similarly, studies confirm that the use of a disguise negatively affects later identification accuracy. In addition to accoutrements like masks and sunglasses, studies show that hats, hoods, and other items that conceal a perpetrator's hair or hairline also impair a witness's ability to make an accurate identification. *See, e.g.*, Brian L. Cutler, *A Sample of Witness, Crime, and Perpetrator Characteristics Affecting Eyewitness Identification Accuracy*, 4 Cardozo Pub L Pol'y & Ethics J 327, 332 (2006) (summarizing cumulative results of six studies showing that identification accuracy dropped from 57 percent to 44 percent when perpetrator hair and hairline cues were masked).

Studies also indicate that witnesses are significantly better at identifying members of their own race than those of other races. *See* Christian A. Meisner & John C. Brigham, *Thirty Years of Investigating the Own-Race Bias in Memory for Faces: A Meta-Analytic Review*, 7 Psychol, Pub Pol'y, & L 3 (2001) (summarizing results of three decades of studies demonstrating effect of own-race bias in eyewitness identifications). Indeed, one study found that cross-racial identifications were 1.56 times more likely to be incorrect than same-race identifications. Conversely, subjects were 2.2 times more likely to accurately identify a person of their own race than a person of another race. *Id.* at 15-16 (2001). Despite widespread acceptance of the cross-racial identification effect in the scientific community, fewer than half of jurors surveyed understand the impact of that factor. Richard S. Schmechel et al., *Beyond the Ken? Testing Juror's Understanding of Eyewitness Reliability Evidence*, 46 Jurimetrics 177, 200 (2006).

H. *Speed of Identification (Response Latency)*

Accurate identifications generally tend to be made faster than inaccurate identifications. Gary L. Wells *et al., Eyewitness Evidence: Improving Its Probative Value*, 7 Psychol Sci Pub Int 45, 67-68 (2006). Some researchers posit that faster identifications correlate with accuracy because the automatic cognitive process associated with facial recognition operates faster than the deliberative cognitions used to make relative judgments, a process that is more likely to result in misidentification. *Id.*

The usefulness of that variable is nevertheless limited by the fact that studies have been unable to agree upon the exact boundaries of the effect. *Id.* One study found that the most accurate identifications were made within 10 to 12 seconds. *Id.* (citing David Dunning & Scott Perretta, *Automaticity and Eyewitness Accuracy: A 10-12 Second Rule for Distinguishing Accurate from Inaccurate Positive Identifications*, Applied Psychol, 87, 951-962 (2002)). A later study, however, noted a positive correlation to accuracy with response times ranging from five to 29 seconds, but also found that identifications made faster than those optimal time boundaries were not highly accurate. *Id.* (citing Nathan Weber *et al*., *Eyewitness Identification Accuracy and Response Latency: The Unruly 10-12 Second Rule*, Experimental Psychol Applied, 139-147 (2004)).

It is worth noting that, although identification speeds can be measured objectively by the administrator of the identification procedure, witnesses' self-reports regarding their deliberative process -- *i.e.*, how long it took the witness to make an identification, how difficult it was, whether the defendant just "popped out" at them, or

whether the witness employed a process of elimination or other relative judgment to arrive at the identification -- are not highly reliable. *Id.* As with self-reports concerning many of the other factors previously discussed, witnesses' perception of their own deliberative process can be manipulated by suggestive procedures and confirming feedback. *Id.* Additionally, studies have shown that suggestive identification procedures can result in quicker identifications without any corresponding increase in accuracy. *See, e.g.,* David F. Ross *et al., When Accurate and Inaccurate Eyewitnesses Look the Same: A Limitation of the 'Pop-Out' Effect and the 10- to 12-Second Rule,* 21 Applied Cognitive Psychol 677-90 (2007).

I. *Level of Certainty*

Despite widespread reliance by judges and juries on the certainty of an eyewitness's identification, studies show that, under most circumstances, witness confidence or certainty is not a good indicator of identification accuracy. Regarding *prospective* certainty -- the witness's confidence *prior to* the identification procedure in his or her ability to make an identification -- a number of meta-analytic studies have found no correlation between certainty and identification accuracy. In contrast, *retrospective* certainty -- witness confidence in the accuracy of their identification *after* it has occurred -- may have a weak correlation with accuracy. *See* Gary L. Wells & Elizabeth A. Olsen, *Eyewitness Testimony,* 54 Ann Rev Psychol 277, 283 (2003) (describing studies). The effect, however appears only within the small percentage of extremely confident witnesses who rated their certainty at 90 percent or higher, and even those individuals were wrong 10 percent of the time. *Id.*

Research also shows that retrospective self-reports on eyewitness certainty are highly susceptible to suggestive procedures and confirming feedback, a factor that further limits the utility of the certainty variable. Wells, *"Good, You Identified the Suspect,"* 83 J Applied Psychol 360. Witnesses who receive confirming feedback -- *i.e.*, are told or otherwise made aware that they made a correct identification -- report higher levels of retrospective confidence than witnesses who receive either no feedback or disconfirming feedback. *Id.* It appears, moreover, that confirming feedback may inflate confidence to a greater degree in mistaken identifications than in correct identifications. *See, e.g.*, Amy L. Bradfield *et al.*, *The Damaging Effect of Confirming Feedback on the Relation Between Eyewitness Certainty and Identification Accuracy*, 87 J Applied Psychol 112, 115 (2002) (reporting that inaccurate witness self-reports increased from an average of 49 percent certain to an average of 67 percent certain after receiving confirming feedback, while the same feedback increased accurate witnesses' certainty only from an average of 80 percent to 85 percent).

Finally, we note that witness certainty, although a poor indicator of identification accuracy in most cases, nevertheless has substantial potential to influence jurors. Studies show that eyewitness confidence is the single most influential factor in juror determinations regarding the accuracy of an eyewitness identification. *See, e.g.*, Gary L. Wells *et al.*, *Accuracy, Confidence, and Juror Perceptions in Eyewitness Identification*, 64 J Applied Psychol 440, 446 (1979); Michael R. Leippe *et al.*, *Cueing Confidence in Eyewitness Identifications: Influence of Biased Lineup Instructions and Pre-Identification Memory Feedback Under Varying Lineup Conditions*, 33 Law & Hum

Behav 194, 194 (2009) (summarizing prior research). Jurors, however, tend to be unaware of the generally weak relationship between confidence and accuracy, and are also unaware of how susceptible witness certainty is to manipulation by suggestive procedures or confirming feedback. *See, e.g.*, Tanja R. Benton *et al.*, *Eyewitness Memory is Still Not Common Sense: Comparing Jurors, Judges and Law Enforcement to Eyewitness Experts*, 20 Applied Cognitive Psychol 115, 120 (2006) (finding that only 38 percent of jurors surveyed correctly understood the relationship between accuracy and confidence and only 50 percent of jurors recognized that witnesses' confidence can be manipulated). As a result, jurors consistently tend to overvalue the effect of the certainty variable in determining the accuracy of eyewitness identifications.

J. *Memory Decay (Retention Interval)*

It is a well-known fact that memory decays over time. The more time that elapses between an initial observation and a later identification procedure (a period referred to in eyewitness identification research as a "retention interval") -- or even a subsequent attempt to recall the initial observation -- the less reliable the later recollection will be. An aspect of memory decay that is less well known, however, is that decay rates are exponential rather than linear, with the greatest proportion of memory loss occurring shortly after an initial observation, then leveling off over time. *See* Kenneth A. Deffenbacher, *Forgetting the Once-Seen Face: Estimating the Strength of an Eyewitness's Memory Representation*, 14 J Experimental Psychol: Applied 139, 148 (2008). As a result, the difference in reliability between an identification made 10 minutes after an incident and one made two hours after an incident maybe significantly

greater than the difference between an identification made two weeks after an incident and one made two months after the same incident.

Estimating the effect of memory decay, however, turns in large part on the strength and quality of the initial memory encoded; a witness forgets, over time, only what was encoded into the witness's memory to begin with. Scientists generally agree that memory never improves. *Henderson*, 208 NJ at 267. Consequently, memory decay must be viewed in conjunction with other variables that affect the initial encoding of memories, such as cross-racial identification, weapon-focus, degree of attention, distance, lighting, and duration of initial exposure.

II. SYSTEM VARIABLES

A. *Blind Administration*

In police lineup identifications, research shows that lineup administrators who know the identity of the suspect often consciously or unconsciously suggest that information to the witness. Steven E. Clark *et al.*, *Lineup Administrator Influences on Eyewitness Identification Decisions*, 15 J Experimental Psychol: Appl 63 (2009). In the most obvious cases of improper suggestion, a lineup administrator may tell a witness outright who the putative suspect in a lineup is, or otherwise make other comments suggesting the suspect's identity. However, studies show that, even in the absence of suggestive verbal communication, lineup administrators can nevertheless convey suggestive information to witnesses nonverbally through tone of voice, pauses, demeanor, facial expressions, and body language. Such nonverbal communications may be difficult to detect and prevent. Indeed, studies show that both witnesses and

administrators are generally unconscious of the influence that the lineup administrator's behavior has on identification process. *See* Ryauu M. Haw & Ronald P. Fisher, *Effects of Administrator-Witness Contact on Eyewitness Identification Accuracy*, 89 J Applied Psychol 1106, 1110 (2004) (summarizing findings of other studies). That said, however, administrator knowledge significantly affects reliability.

To guard against that influence, experts recommend that all identification procedures be conducted by a "blind" administrator -- a person who does not know the identity of the suspect. To realize the full value of blind administration, witnesses should also be advised of that fact in order to prevent them from attempting to infer suggestive information from an administrator's words or conduct.

B. *Pre-identification Instructions*

Studies show that the likelihood of misidentification is significantly decreased when witnesses are instructed prior to an identification procedure that a suspect may or may not be in the lineup or photo array, and that it is permissible not to identify anyone. Indeed, one study found that in target-absent[14] lineup procedures, witnesses who were warned that the perpetrator might not be in the lineup misidentified a suspect only 33 percent of the time, compared to 78 percent of the witnesses not so instructed. Roy S.

[14] "Target-absent" refers to a lineup or photo array that does not contain the suspect. Target-absent lineups occur in actual practice when the police officials mistakenly fix their suspicion on an innocent person. Scientific research on target-absent lineups is particularly relevant to the reliability of identifications because nearly all wrongful convictions based on eyewitness misidentification result from target-absent procedures. That is so because when the target (the actual perpetrator) is present, misidentifications will generally implicate only known-innocent foils, and therefore be immediately recognized as mistakes.

Malpass & Patricia G. Devine, *Eyewitness Identification: Lineup Instructions and the Absence of the Offender*, 66 J Applied Psychol 482, 485 (1981). There appears to be little downside to giving such instructions. According to a 2005 meta-analysis, unbiased instructions greatly increased correct suspect rejections in target-absent lineups, but had no appreciable effect on the rate of correct identifications in target-present lineups. Steven E. Clark, *A Re-examination of the Effects of Biased Lineup Instructions in Eyewitness Identification*, 29 Law & Hum Behav 395, 397 (2005).

C. *Lineup Construction*

An identification procedure is essentially a pseudo-scientific experiment conducted by law enforcement officials to test their hypothesis that a particular suspect is, in fact, the perpetrator that they seek. Wells & Olsen, *Eyewitness Testimony*, 54 Ann Rev Psychol 277, 285 (2003). However, like any experiment, the validity of the results depends largely on the careful design and unbiased implementation of the underlying procedures. The purpose behind embedding a suspect in a group of "filler" subjects known to be innocent is to test the witness's memory. If, however, the suspect stands out from the other subjects in any way that might lead the witness to select the suspect based on something other than her own memory, the experiment fails to achieve its purpose.

Experts generally recommend that the subjects used as lineup fillers should be selected first on the basis of their agreement with the witness's description of the perpetrator; if no description of a particular feature is available, then experts recommend that lineup fillers be chosen based on their similarity to the suspect. Roy S. Malpass *et al.*, *Lineup Construction and Lineup Fairness*, in 2 The Handbook of Eyewitness

Psychology: Memory for People 155, 157-58 (R.C.L. Lindsay *et al.*, eds., 2007); National Institute of Justice, U.S. Dep't of Just, *Eyewitness Evidence: A Guide for Law Enforcement* 29 (1999). If a suspect differs significantly from the witness's description, the lineup fillers should be matched to the suspect rather than the description in order to prevent the suspect from standing out. *Id.* Suspects should not be displayed in distinctive clothing or in clothing that matches the witness's description unless all of the lineup fillers are also dressed alike; a suspect's distinctive features -- scars, tattoos, etc. -- should either be concealed or artificially added to all of the lineup fillers. *Id.* Lineups should contain only one suspect and utilize a sufficient number of fillers to minimize the likelihood that a witness will select the suspect based on chance rather than memory. *Id.* Most sources recommend a minimum of five fillers to one suspect. *Id.* Any increase in the number of lineup fillers correspondingly decreases the probability of misidentification occurring by chance alone. Ultimately, if for any reason a suspect disproportionately stands out from the lineup fillers surrounding him or her, then the identification procedure is suggestive -- and the reliability of any resulting identification decreases correspondingly.

D. *Simultaneous versus Sequential Lineups*

In traditional identification procedures, a number of persons or photographs are displayed simultaneously to an eyewitness. Some studies demonstrate, however, that witnesses permitted to view all the subjects together have a tendency to make a "relative judgment" -- choosing the person or photograph that most closely resembles the perpetrator from among the other subjects -- as opposed to making an "absolute

judgment" -- comparing each subject to their memory of the perpetrator and deciding whether that subject is the perpetrator or not. Relative judgments process have been found to increase the likelihood of misidentification, especially in target-absent lineups. To correct that problem, researchers recommend an alternative lineup procedure in which the witness is presented with each individual person or photograph sequentially. Because the witness views only one person or photograph at a time, researchers posit that the witness is less able to engage in relative judgment, and thus less likely to misidentify innocent suspects. Nancy Steblay *et al., Eyewitness Accuracy Rates in Sequential and Simultaneous Lineup Presentations: A Meta-Analytic Comparison*, 25 Law & Hum Behav 459, 463-64 (2001). Studies show a moderate trend toward fewer misidentifications in sequential lineups than in simultaneous lineups. *Id.* at 463-64 (reporting that, in the combined results of 30 experiments collected from 19 previous research papers, 51 percent of witnesses presented with simultaneous target-absent lineups misidentified a person, while only 28 percent did so in sequential lineups).

Other recent studies, however, challenge the validity of that finding, cautioning that the different outcomes in sequential and simultaneous lineups may be attributable to other factors. Specifically, some research shows that sequential lineups may result in *more* misidentifications when not conducted by a blind administrator, and that other factors such as differing methods of witness instruction and questioning may explain the difference in results. Dawn McQuiston-Surrett *et al., Sequential vs. Simultaneous Lineups: A Review of Methods, Data, and Theory*, 12 Psychol Pub Pol'y & L 137, 143-51 (2006); Roy S. Malpass, *et al., Public Policy and Sequential Lineups*, 14

Legal & Criminological Psychology 1 (2009).

E. *Showups*

A "showup" is a procedure in which police officers present an eyewitness with a single suspect for identification, often (but not necessarily) conducted in the field shortly after a crime has taken place. Showups are widely regarded as inherently suggestive -- and therefore less reliable than properly administered lineup identifications -- because the witness is always aware of who police officers have targeted as a suspect. Furthermore, unlike lineups, showups have no mechanism to distinguish witnesses who are guessing from those who actually recognize the suspect. In an unbiased lineup, an unreliable witness will often be exposed by a "false positive" response identifying a known innocent subject. By contrast, because showups involve a lone suspect, every witness who guesses will positively identify the suspect, and every positive identification is regarded as a "hit." For that reason, misidentifications that occur in showups are less likely to be discovered as mistakes.

Despite those shortcomings, some research indicates that, when conducted properly and within a limited time period immediately following an incident, showups can be equally as reliable as lineups. Showups are most likely to be reliable when they occur immediately after viewing a criminal perpetrator in action, ostensibly because the benefits of a fresh memory outweigh the inherent suggestiveness of the procedure. In as little as two hours after an event occurs, however, the likelihood of misidentification in a showup procedure increases dramatically. In one study, the immediate showup identification of an innocent suspect produced a misidentification rate of 18 percent

(compared to 16 percent in an immediate lineup); a delay of only two hours increased the misidentification rate to 58 percent (compared to 14 percent in a lineup). David A. Yarmey *et al.*, *Accuracy of Eyewitness Identifications in Showups and Lineups*, 20 Law & Hum Behav 459, 464 (1996).

Studies also demonstrate that showups pose a particularly high risk of misidentification for innocent suspects who happen to look like the perpetrator. A 2003 meta-analysis found that, when an innocent suspect closely resembled a perpetrator, 23 percent of witnesses misidentified the suspect in a showup, compared to 17 percent of the witnesses presented with the same suspect in a lineup. Nancy Steblay *et al.*, *Eyewitness Accuracy Rates in Police Showup and Lineup Presentations: A Meta-Analytic Comparison*, 27 Law & Hum Behav 523, 533 (2003). In addition, witnesses at a showup may be more inclined to base their identifications on clothing rather than on facial features. Studies indicate that showups present an especially high risk of misidentification for suspects wearing clothing similar to that of the perpetrator. Jennifer E. Dysart et al., *Show-Ups: The Critical Issue of Clothing Bias*, 20 Applied Cognitive Psychology 1009 (2006).

F. *Multiple Viewings (Mugshot Exposure, Mugshot Commitment, Source Monitoring Errors, Source Confusion)*

Viewing a suspect multiple times throughout the course of an investigation adversely affects the reliability of any identification that follows those viewings. Researchers posit that the negative effect of multiple viewings may result from the witness's inability to discern the source of his or her recognition of the suspect, an

occurrence referred to as source confusion or a source monitoring error. Because of the possibility of source confusion, once a witness has viewed the suspect in any context other than the initial incident, it is impossible to determine whether a subsequent identification is based on the observation of the initial incident or on the subsequent viewing of the suspect.

Researchers have identified several specific types of multiple viewing problems that often occur in eyewitness identifications. One, referred to as "mugshot exposure," occurs when police officials have a witness peruse random mugshots on file from previous cases in an attempt to generate leads. Studies show that prior exposure to an innocent suspect's mugshot increases the likelihood that the witness will subsequently misidentify the suspect as the perpetrator, based on the witness's sense of recognition generated by the previously viewed picture. Kenneth A. Deffenbacher *et al.*, *Mugshot Exposure Effects: Retroactive Interference, Mugshot Commitment, Source Confusion, and Unconscious Transference*, 30 Law & Hum Behav 287 (2006). The mugshot exposure problem can be exacerbated when the witness actually identifies an innocent person's mugshot as someone who is, or resembles, the perpetrator, resulting in a related effect referred to as "mugshot commitment." When a later identification procedure includes the person whose mugshot the witness previously identified, studies show that witnesses are disproportionately likely to remain "committed" to the person whose mugshot they had previously selected. *Id.*

A similar problem occurs when a witness is asked to participate in multiple identification procedures. Whether or not the witness selects the suspect in an initial

identification procedure, the procedure increases the witness's familiarity with the suspect's face. If the witness is later presented with another lineup in which the same suspect appears, the suspect may tend to stand out or appear familiar to the witness as a result of the prior lineup, especially when the suspect is the only person repeated in both lineups. *Henderson*, 208 NJ at 255-56; Deffenbacher, *Mugshot Exposure Effects*, 30 Law & Hum Behav at 299. As with mugshot exposure, the problem is exacerbated if a witness actually identifies a suspect in an initial lineup or photo array. In subsequent identification procedures, such witnesses are likely to simply remain committed to the person that they initially identified rather than reexamine their initial memory of the perpetrator. *Henderson,* 208 NJ at 256; *see also* David F. Ross *et al.*, *Unconscious Transference and Mistaken Identity: When a Witness Misidentifies a Familiar but Innocent Person*, 79 Applied Psychol 918, 929 (discussing another study that found that 89 percent of subjects who misidentified a person in an initial, target-absent lineup also misidentified the same person in a second lineup -- despite the fact that the second lineup also contained the true perpetrator). For those reasons, successive identification procedures can be unreliable as tests of a witness's memory regarding an actual perpetrator, and thus may have little probative value.

Yet another facet of the multiple viewing problem is the phenomenon of unconscious transference. Studies have found that witnesses who, prior to an identification procedure, have incidentally but innocently encountered a suspect may unconsciously transfer the familiar suspect to the role of criminal perpetrator in their memory. *See* Ross, *Unconscious Transference and Mistaken Identity*, 79 J Applied

Psychol 918. The phenomenon is most problematic when a witness is vaguely familiar with a suspect but unconscious of why that is so. The result, often, is that the witness mistakenly attributes that familiarity to having previously observed the suspect at the crime scene. *See* J. D. Read *et al., The Unconscious Transference Effect: Are Innocent Bystanders Ever Misidentified?*, 4 Applied Cognitive Psychol 26 (1990) (noting that, to produce unconscious transference errors, a witness's familiarity with the suspect's face must not be "so high as to elicit recall of the misidentified person's correct context or identity").

Although multiple viewings of a suspect always introduce a degree of doubt as to the reliability of an identification, studies suggest that witnesses may be most susceptible to source monitoring errors when their initial memory trace is weakest. *See, e.g.*, Deffenbacher, *Mugshot Exposure Effects*, 30 Law & Hum Behav at 288 (noting that "failure of memory for facial source or context is all the more problematic when viewing of the perpetrator has occurred under less than optimal viewing conditions"). Thus, the presence of estimator variables indicating weak initial encoding may magnify the suggestive effects of multiple viewings.

G. *Suggestive Questioning, Cowitness Contamination, and Other Sources of Post-Event Memory Contamination*

The way in which eyewitnesses are questioned or converse about an event can alter their memory of the event. Elizabeth F. Loftus & Guido Zanni, *Eyewitness Testimony: The Influence of the Wording of a Question*, 5 Bull Psychonomic Soc'y 86 (1975). Studies show that the use of suggestive wording and leading questions tend to

result in answers that more closely fit the expectation embedded in the question. For example, in one study, participants who had viewed a short video of a traffic accident were asked various questions about what they had seen in the video. *Id.* Although there was no broken headlight in the video, participants who were asked "Did you see *the* broken headlight?" were more than twice as likely to answer "Yes" than those who were asked "Did you see *a* broken headlight?" *Id.* (emphasis added).

Witness memory, moreover, can become contaminated by external information or assumptions embedded in questions or otherwise communicated to the witness. In one study, participants were asked, after viewing a short video, to estimate the speed of a car in the video either "when it passed the barn" or without mention of a barn. Elizabeth F. Loftus, *Leading Questions and the Eyewitness Report*, 7 Cognitive Psychol 560, 566 (1975). One week later, the participants were asked whether they had seen a barn in the video. *Id.* Although there was no barn in the video, 17 percent of the subjects who had been asked the question presupposing the existence of a barn reported having seen the barn, compared to two percent of the subjects to whom no barn had been mentioned. *Id.*

Another study found that participants' estimations of a vehicle's speed differed according to whether a question used the words "collided," "bumped," "contacted," "hit," or "smashed" to describe the taped car accident that they viewed. Elizabeth F. Loftus & John C. Palmer, *Reconstruction of Automobile Destruction: An Example of the Interaction Between Language and Memory*, 13 J Verbal Learning & Verbal Behav 585 (1974). Participants who were asked how fast the cars were going

when they "smashed" into each other estimated an average speed of 40.5 miles per hour, whereas participants who were presented with the same question using the word "hit" or "contacted" estimated average speeds of 34.0 and 31.8 miles per hour, respectively. *Id.* at 586. A follow-up experiment found that participants questioned using the word "smashed" were more than twice as likely to erroneously report seeing broken glass in the video as participants questioned using the word "hit" or not questioned at all. *Id.* at 587.

Post-event memory contamination is generally categorized as a system variable because state actors are often the entities engaged in questioning eyewitnesses to crimes. That said, however, witness memory is equally susceptible to contamination by nonstate actors. One common source of third-party memory contamination is cowitness interaction. When a witness is permitted to discuss the event with other witnesses or views another witness's identification decision, the witness may alter his or her own memory or identification decision to conform to that of the cowitness. Elin M. Skagerberg, *Co-Witness Feedback in Line-Ups,* 21 Applied Cognitive Psychol 489 (2007). In one study, half of the participants were shown a sequence of photographs illustrating a theft involving a single person, while the other half viewed the same theft but with two persons. *Id.* at 490 (discussing another study). When questioned individually, 97 percent of the participants correctly remembered the number of people involved in the theft that they viewed. *Id.* However, after discussing the event with another participant who had viewed the alternate scenario, one of the participants in more than 75 percent of the pairs changed their answer to conform to their partner's recollections. *Id*.

H. *Suggestive Feedback and Recording Confidence*

As noted above, post-identification confirming feedback tends to falsely inflate witnesses' confidence in the accuracy of their identifications, as well as their recollections concerning the quality of their opportunity to view a perpetrator and an event. Confirming feedback, by definition, takes place after an identification and thus does not affect the result of the identification itself. It does, however, falsely inflate witness confidence in the reports they tender regarding many of the factors commonly used by courts and jurors to gauge eyewitness reliability. As a result, the danger of confirming feedback lies in its tendency to increase the *appearance* of reliability without increasing reliability itself.

The detrimental effects of post-identification feedback are well-established in the scientific literature. One much-cited study on the effects of post-identification confirming feedback staged an experiment in which witnesses, after making an incorrect identification from a target-absent lineup, were told either, "Good, you identified the suspect," "Actually, the suspect was number __," or given no feedback at all. The witnesses were then asked to answer questions regarding the incident and the identification task. The study found that the witnesses who received confirming feedback were not only more certain in the accuracy of their identification, but also reported having had a better view of the perpetrator, noticing more details of the perpetrator's face, paying closer attention to the event they witnessed, and making their identifications quicker and with greater ease than participants who were given no feedback or disconfirming feedback. Wells, *"Good, You Identified the Suspect,"* 83 J Applied

Psychology 360 (1998). A more recent meta-analysis examining the results of 20 experiments involving over 2,400 participants confirmed that studies on this factor have produced "remarkably consistent" effects, and "provide dramatic evidence that post-identification feedback can compromise the integrity of a witness's memory." Amy B. Douglass & Nancy Steblay, *Memory Distortion in Eyewitnesses: A Meta-Analysis of the Post-Identification Feedback Effect*, 20 Applied Cognitive Psychol 859, 865-66 (2006).

Witnesses often receive confirming feedback from the administrator of the identification procedure directly after making an identification, but they may also obtain feedback from other sources, such as news accounts identifying the suspect as the perpetrator, conversations with other witnesses, or pretrial witness preparation sessions. Skagerberg, *Co-Witness Feedback in Line-Ups*, 21 Applied Cognitive Psychol 489 (2007). Indeed, eyewitnesses who are subsequently called to testify in criminal proceedings are always subjected to some degree of confirming feedback because they can infer that they identified the right person from the fact that the state is prosecuting the suspect they identified.

To moderate the effect of this factor, researchers recommend that administrators of identification procedures record the witness's certainty statements immediately after an identification has been made, and before the witness is given any feedback. Some studies have reported moderate success in inoculating witnesses against the effects of confirming feedback by asking the witnesses to reflect or report on their level of certainty prior to being given confirming feedback. Gary L. Wells & Amy L. Bradfield, *Distortions in Eyewitnesses' Recollections: Can the Postidentification-*

1 *Feedback Effect Be Moderated?*, 10 Psychol Sci 138 (1999).