

HEADNOTE:

CRIMINAL LAW — EXPERT TESTIMONY — The horizontal gaze nystagmus (HGN) test is a scientific test, and testimony recounting a defendant's performance on the test is admissible in evidence pursuant to Md. Rule 5-702.

In the Circuit Court for St. Mary's County  
Case No. 06-087

**IN THE COURT OF APPEALS**  
**OF MARYLAND**

No. 45  
September Term, 2008

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STATE OF MARYLAND

v.

PAUL BENJAMIN BLACKWELL

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Bell, C.J.  
Harrell  
Greene  
Murphy  
Adkins  
Barbera,  
Eldridge, John C. (Retired, Specially  
Assigned),

JJ.

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Opinion by Greene, J.  
Murphy, J. Dissents.

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Filed: May 14, 2009

Paul Benjamin Blackwell, respondent, was convicted of multiple offenses, including driving a vehicle while under the influence of alcohol and driving a vehicle while impaired by alcohol. At trial, before a jury in the Circuit Court for St. Mary's County, Maryland State Trooper Jeffrey Linger testified that he administered the horizontal gaze nystagmus (HGN) test to Blackwell and observed "lack of smooth pursuit" and "distinct nystagmus at maximum deviation" in each eye. Blackwell appealed his convictions to the Court of Special Appeals. Relying on *Ragland v. State*, 385 Md. 706, 870 A.2d 609 (2005), the intermediate appellate court held that Linger's testimony about the HGN test constituted expert testimony, the admission of which, without qualification by the trial court, was erroneous and warranted remand for a new trial. We shall affirm the judgment of the Court of Special Appeals, emphasizing that the HGN test is a scientific test and that testimony recounting a defendant's performance on the test is admissible in evidence pursuant to Md. Rule 5-702.

## **I.**

Blackwell was charged with multiple offenses surrounding his driving of a vehicle on the morning of August 17, 2005. The charges included driving a vehicle while under the influence of alcohol, driving a vehicle while impaired by alcohol, driving on a revoked

license, and driving without a license.<sup>1</sup> At Blackwell’s trial, before a jury in the Circuit Court for St. Mary’s County, the State’s sole witness was Maryland State Trooper Jeffrey Linger, who stopped the vehicle Blackwell was operating on the morning in question.

Trooper Linger testified that he stopped Blackwell’s vehicle after noticing a non-functioning tail light. Linger also testified that when he approached the vehicle to obtain Blackwell’s identification, he detected an odor of alcohol on Blackwell’s breath. Linger further stated that “[Blackwell’s] eyes were glassy, speech was slurred.”

Upon checking Blackwell’s driving status, Trooper Linger learned that Blackwell’s license had been revoked. Linger then transported Blackwell to the State police barrack to administer three field sobriety tests: the HGN test, the “walk-and-turn” test, and the one-leg stand test. Pertaining to Trooper Linger’s administration of the HGN test to Blackwell, the following exchange occurred at trial:

[Trooper Linger:] . . . I administered field sobriety tests to Mr. Blackwell.

Field sobriety tests I administered were — there’s three tests that we administer, that we are trained in through the police academy. It’s the horizontal gaze nystagmus, the walk and turn, and the one-leg stand.

[The Prosecutor:] How did he perform on those tests?

[Trooper Linger:] On the horizontal —

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<sup>1</sup>In a related matter, Blackwell was charged with contempt, convicted, sentenced to a thirty-day term of incarceration, and fined \$1,000. Blackwell’s contempt conviction, which was reversed on appeal to the Court of Special Appeals, is not at issue before us.

[Defense Counsel]: Objection.

The Court: Okay. If you are going to use the horizontal gaze nystagmus test, you must lay a foundation that the witness is qualified to administer it.

By [the Prosecutor]:

Q. What did you do as a result of how he performed on the field sobriety tests? What did you do after he performed the field sobriety tests?

A. I read Mr. Blackwell his DR-15 advice of rights, which explains what happens if he decides to take the breath test, an intoximeter test for alcohol, what happens if he does not take the test, his right to an administrative hearing through the Motor Vehicle Administration.

Q. Did he elect to take that test?

A. No.<sup>[2]</sup>

Q. Okay. I'm gonna back you up. With respect to the field sobriety tests that you typically administer, what are the three tests that you typically administer?

A. The horizontal gaze nystagmus, the walk and turn, and the one-leg stand.

Q. With respect to the horizontal gaze nystagmus test, what is the test? What is the horizontal gaze nystagmus test?

A. The test where we look for clues. The first thing we check is equal pupil size. We check that the eyes track back and forth. We — you hold a stationary object in front of them and you

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<sup>2</sup>Blackwell testified that he refused to take a breath test initially but that he later changed his mind. He also testified to taking multiple breath tests, including “one at the car” and “several tests at the barracks.” Moreover, Blackwell testified that he had not been drinking.

check that the pupil size is equal, and that both eyes are tracking the object equally, and then we look for three clues.

Q. Let me stop you for a second. Does it test for the oscillation of the pupils and the tracking of the pupils?

A. Yes.

Q. And were you trained in administering that test?

A. Yes, through the Maryland State Police Academy.

Q. Are you certified to administer that test?

A. Yes.

Q. And approximately how many times have you administered that test, if you know?

A. Over when?

Q. In your career as a Maryland State trooper, how many times have you administered that test, if you know?

A. I would have to say approximately 150.

Q. Okay. Did you perform that test on the Defendant, Mr. Blackwell?

A. Yes.

Q. Okay. What, if any, observations did you make as a result of the test?

[Defense Counsel]: Objection.

The Court: What's the basis of the objection?

[Defense Counsel]: I don't think he's properly qualified

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The Court: Okay

[Defense Counsel]: — to give the test.

The Court: All right [sic], thank you, [Defense Counsel].

Going to this gaze nystagmus test, have you testified about the results of that in any courts in the State of Maryland?

[Trooper Linger]: Yes.

The Court: What courts?

[Trooper Linger]: St. Mary's District and Circuit Courts.

The Court: Okay. And covering what period of time?

[Trooper Linger]: A couple of years. It goes back a couple of years.

The Court: All right [sic], thank you, officer. [Defense Counsel], is there any further voir dire questions on the gaze nystagmus test?

[Defense Counsel]: Just basically as to whether his police trained commission certification is updated and proper.

The Court: Okay. How about that question, officer?

[Trooper Linger]: Yes, sir.

The Court: Are you currently certified to administer the gaze nystagmus test?

[Trooper Linger]: Yes, sir. I have the card in my pocket, actually.

The Court: Okay. Any further, [Defense Counsel]?

[Defense Counsel]: If we could see the card as to what

his expiration date is.

The Court: Okay, he wants to see the card. Okay, show him the card, please.

[Defense Counsel]: Okay.

The Court: Any further questions, [Defense Counsel]?

[Defense Counsel]: No, Your Honor.

The Court: Thank you very much. All right [sic], go ahead, [Prosecutor].

[The Prosecutor:] Thank you, Your Honor.

By [the Prosecutor]:

Q. Trooper Linger, what, if any, observations did you make with respect to how Mr. Blackwell performed on the horizontal gaze nystagmus test?

A. Well, Mr. Blackwell —

[Defense Counsel]: Objection.

The Court: The objection is overruled.

[Trooper Linger:] — Mr. Blackwell had lack of smooth pursuit in both his left and right eye. That's the first clue we look for.

Second clue, Mr. Blackwell had distinct nystagmus at maximum deviation in each eye. I will be happy to explain what that means.

The third clue, there is onset of nystagmus in each eye of Mr. Blackwell.

Following Trooper Linger's testimony about the HGN test, the officer testified about



what he observed when administering the “walk-and-turn” test. He stated:

Mr. Blackwell couldn't keep his balance as I gave him the instructions, which is a clue. We are trained to look for clues. He couldn't keep his balance. He started too soon, before I instructed him to do so. He stepped off the line. He missed heel to toe, which is another clue. On every step that he took — you take nine steps up, nine steps back, and he missed heel to toe on every step. . . .

Linger noted, however, that he stopped the “walk-and-turn” test because Blackwell had an injured leg. For this reason as well, Linger did not administer the one-leg stand test to Blackwell. During the State's closing argument, with respect to Trooper Linger's administration of the HGN test, the prosecutor stated the following: “[Linger] testified that the horizontal gaze nystagmus test, which he's certified to perform, he is up to date on the credentials on that, [Blackwell] performed that test, and he failed those tests. All those clues were present for the HGN.”

At the conclusion of the trial, the jury returned verdicts of guilty, finding Blackwell guilty of driving a vehicle while under the influence of alcohol, driving a vehicle while impaired by alcohol, driving without a license, and driving while his license was revoked. Blackwell appealed his convictions to the Court of Special Appeals. Relying on *Ragland*,<sup>3</sup> the intermediate appellate court reasoned that Trooper Linger's testimony about the HGN test constituted expert testimony because it was based upon the officer's specialized

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<sup>3</sup>See *Ragland v. State*, 385 Md. 706, 726, 870 A.2d 609, 620-21 (2005) (holding that two officers' testimonies that, based on their training and experiences, the defendant was involved in a drug transaction constituted expert testimony pursuant to Md. Rule 5-702).

knowledge and training. The Court of Special Appeals reversed Blackwell’s convictions as to the alcohol-related offenses because “the trial court erred in admitting Trooper Linger’s testimony without having him qualified as an expert [pursuant to Md. Rule 5-702].”

The State filed a petition for writ of certiorari, which we granted. *State v. Blackwell*, 405 Md. 290, 950 A.2d 828 (2008). The State presents one question for our review:

Did the Court of Special Appeals incorrectly apply *Ragland v. State*, 385 Md. 706 (2005) when it concluded that the court erred in allowing the arresting officer to testify as to what he observed when he administered the HGN test to Blackwell and incorrectly fail to consider the “collective effect of other evidence,” as this Court did in *Fields v. State*, 395 Md. 758 (2006), when it found that the error was not harmless beyond a reasonable doubt?

## II.

### A.

Nystagmus is the “rapid involuntary oscillation of the eyeballs.” *Schultz v. State*, 106 Md. App. 145, 148 n.1, 664 A.2d 60, 61 n.1 (1995) (quoting WEBSTER’S NINTH NEW COLLEGIATE DICTIONARY 813 (1989)). HGN is “a lateral or horizontal jerking when the eye gazes to the side.” HORIZONTAL GAZE NYSTAGMUS: THE SCIENCE & THE LAW 1 (1999). Although HGN is a natural phenomenon, alcohol magnifies its effects. *Id.*; *United States v. Horn*, 185 F. Supp. 2d 530, 537 (D. Md. 2002). The following describes the underlying science:

“Alcohol is a central nervous system depressant affecting many of the higher as well as lower motor control systems of the body. This results in poor motor coordination, sluggish reflexes, and

emotional instability. The part of the nervous system that fine-tunes and controls hand movements and body posture also controls eye movements. When intoxicated, a person's nervous system will display a breakdown in the smooth and accurate control of eye movements. This breakdown in the smooth control of eye movement may result in the inability to hold the eyes steady, resulting in a number of observable changes of impaired oculomotor functioning.”

HORIZONTAL GAZE NYSTAGMUS: THE SCIENCE & THE LAW, *supra*, at 5 (quoting Jack E. Richman & John Jakobowski, *The Competency and Accuracy of Police Academy Recruits in the Use of the Horizontal Gaze Nystagmus Test for Detecting Alcohol Impairment*, 47 NEW ENG. J. OPTOMETRY 5, 6 (1994)).

Because nystagmus becomes more pronounced as the degree of alcohol impairment becomes greater, law enforcement officials have looked to HGN as an indicator of alcohol consumption for several decades. *Schultz*, 106 Md. App. at 156 n.4, 664 A.2d at 65 n.4; HORIZONTAL GAZE NYSTAGMUS: THE SCIENCE & THE LAW, *supra*, at 1. *But see Wilson v. State*, 124 Md. App. 543, 553, 723 A.2d 494, 498 (1999) (holding that the HGN test may not be used to estimate a specific blood alcohol content). Indeed, the HGN test is one component of a three-part battery of field sobriety tests established by the National Highway Transportation Safety Administration (NHTSA). Joseph R. Meaney, *Horizontal Gaze Nystagmus: A Closer Look*, 36 JURIMETRICS J. 383, 383-84 (1996). The other two components are the “walk-and-turn” and one-leg stand tests. Meaney, *supra*, at 384 n.4.

The NHTSA has set forth certain guidelines for officers to follow when administering

the HGN test:

[T]he officer administering the HGN test [should] . . . stand directly in front of the driver and require the individual to stand at attention, feet together and arms to the side. [NHTSA, DOT-HS-806-512, *Improved Sobriety Testing* (1984), reprinted in 2 DONALD H. NICHOLS, DRINKING/DRIVING LITIGATION, ch. 26, app. A (1985)]. To ensure accuracy, the NHTSA manual further instructs the officer to perform the test outside of the automobile in a well-lit area. *Id.* If the driver wears glasses, they should be removed to ensure proper observation by the officer; and if the suspect wears hard contacts lenses the test should not be administered because the lenses may dislodge and interfere with eye movement. *Id.* Next, the officer is to instruct the driver to focus the eyes on an object (in this case, a pen) held fifteen inches from the driver at eye level. *Id.* The officer then gradually moves the object, or stimulus, horizontally out of the driver's field of vision towards the ear and watches the driver's eyeball to detect involuntary jerking — or nystagmus. *Id.* The police officer utilizes the procedure as an indication of whether the driver is under the influence of alcohol by observing: (1) the inability of each eye to follow movement smoothly (“lack of smooth pursuit”), (2) conspicuous nystagmus, or jerking, at maximum deviation and (3) the onset of nystagmus prior to reaching a 45 degree angle in relation to the center point. *Id.*

*State v. Ruthardt*, 680 A.2d 349, 353 (Del. Super. Ct. 1996). Proper administration of the HGN test reduces the chance that the nystagmus is attributable to any of several possible other causes mentioned in the cases and medical literature. *Horn*, 185 F. Supp. 2d at 555; *Ruthardt*, 680 A.2d at 360; *Schultz*, 106 Md. App. at 180, 664 A.2d at 77.<sup>4</sup>

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<sup>4</sup>These possible causes include:

problems with the inner ear labyrinth; irrigating the ears with warm or cold water; influenza; streptococcus infection; vertigo; measles; syphilis; arteriosclerosis; Korchaff's syndrome; brain

(continued...)

In the case at bar, relying on *Ragland*, the Court of Special Appeals held that “the trial court erred in admitting Trooper Linger’s testimony without having him qualified as an expert.” The State challenges only the determination of the intermediate appellate court that Linger presented expert testimony; it does not argue that Linger met the qualifications of an expert witness. Should this Court conclude that Linger testified as an expert witness in recounting Blackwell’s performance on the HGN test, the State then argues that the admission of such testimony by the trial court was harmless error.

The State argues that the Court of Special Appeals applied *Ragland* incorrectly when it held that Trooper Linger’s testimony about the HGN test was expert testimony. In *Ragland*, 385 Md. 706, 870 A.2d 609, two police officers witnessed an alleged drug transaction involving the defendant, Jeffrey Louis Ragland, Jr., although they did not recover any contraband from Ragland. At Ragland’s trial, the first officer testified that he received

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<sup>4</sup>(...continued)

hemorrhage; epilepsy; hypertension; motion sickness; sunstroke; eye strain; eye muscle fatigue; glaucoma; changes in atmospheric pressure; consumption of excessive amounts of caffeine; excessive exposure to nicotine; aspirin; circadian rhythms; acute head trauma; chronic head trauma; some prescription drugs; tranquilizers, pain medication, and anti-convulsant medicine; barbiturates; disorders of the vestibular apparatus and brain stem; cerebellum dysfunction; heredity; diet; toxins; exposure to solvents; extreme chilling; eye muscle imbalance; lesions; continuous movement of the visual field past the eyes; and antihistamine use.

*United States v. Horn*, 185 F. Supp. 2d 530, 556 n.45 (D. Md. 2002) (citing *Schultz v. State*, 106 Md. App. 145, 180-81, 664 A.2d 60, 77 (1995)).

training in the investigation of drug crimes through several drug recognition courses and seminars. Based on this experience, the first officer then testified that Ragland was involved in a drug transaction. The second officer also testified that, based on the officer's prior training and experience, Ragland was involved in a drug transaction. Defense counsel interposed several objections to each of the officers' testimonies, arguing that the officers had testified as experts without the defense receiving notice<sup>5</sup> that the officers would be offering expert testimony. The trial judge overruled the objections of defense counsel, reasoning that the officers' testimonies constituted lay opinions.<sup>6</sup>

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<sup>5</sup>Under the then-current version of Md. Rule 4-263(b)(4), the State was required to disclose to the defendant, upon request, reports or statements made in connection with the action by each expert consulted by the State. The current iteration of the Rule requires the State to disclose such information in the absence of any request by the defendant. *See* Md. Rule 4-263(d)(8).

<sup>6</sup>With respect to the testimony of the first officer specifically, the following discussion ensued at the bench:

[Defense Counsel]: Your Honor, I've not received any notice that anyone other than the chemist is testifying as an expert. What the State is trying to elicit is an opinion based upon training and experience in narcotic — in investigating narcotic crimes.

The Court: Well, he's not — he's asking him an opinion question, I think. Mr. [Prosecutor] —

[Prosecutor]: Yes. It's not an expert opinion. That's what we elicited at the start, is that he brings to this like a mechanic who works on Mercedes, brings special knowledge about Mercedes. He brings special knowledge about drug deals and what these things bring. So I'm asking him what's his opinion of what

(continued...)

Upon our review in *Ragland*, we considered whether the officers’ testimonies constituted lay opinion testimony under Md. Rule 5-701 or expert testimony under Md. Rule 5-702. Rule 5-701 (“Opinion testimony by lay witnesses”) provides:

If the witness is not testifying as an expert, the witness’s testimony 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 the witness’s testimony or the determination of a fact in issue.

Rule 5-702 (“Testimony by experts”) provides:

Expert testimony may be admitted, in the form of an opinion or otherwise, if the court determines that the testimony will assist the trier of fact to understand the evidence or to determine a fact in issue. In making that determination, the court shall determine (1) whether the witness is qualified as an expert by knowledge, skill, experience, training, or education, (2) the appropriateness of the expert testimony on the particular subject, and (3) whether a sufficient factual basis exists to support the expert testimony.

We held that “Md. Rules 5-701 and 5-702 prohibit the admission as ‘lay opinion’ of testimony based upon specialized knowledge, skill, experience, training or education.” *Ragland*, 385 Md. at 725, 870 A.2d at 620. In so holding, we recognized that “by permitting testimony based on specialized knowledge, education, or skill under . . . Md. Rule 5-701, parties may avoid the notice and discovery requirements of our rules and blur the distinction

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<sup>6</sup>(...continued)  
occurred.

The Court: I’m going to permit the answer over objection.

*Ragland*, 385 Md. at 712, 870 A.2d at 612-13 (alterations in original).

between the two rules.” *Id.* Accordingly, because the officers’ testimonies were based on their specialized knowledge, experience, and training, the admission of their testimonies, without qualification by the trial court, and without notice to Ragland, the defendant, was an abuse of discretion.

Applying the rule from *Ragland* to the instant case, we hold that Trooper Linger’s testimony about Blackwell’s performance on the HGN test constituted expert testimony subject to the strictures of Md. Rule 5-702. Linger reported, among other things, that Blackwell had “lack of smooth pursuit” and “distinct nystagmus at maximum deviation” in each eye. This testimony was not based upon Linger’s general knowledge as a layperson but upon his specialized knowledge and training. To be sure, the HGN test is a scientific test, and a layperson would not necessarily know that “distinct nystagmus at maximum deviation” is an indicator of drunkenness; nor could a layperson take that measurement with any accuracy or reliability. *See, e.g., Fargo v. McLaughlin*, 512 N.W.2d 700, 707 (N.D. 1994) (“Through specialized training in HGN, the officer is able to draw inferences and deductions from his observations of the accused that might elude laypersons.”); *see also Schultz*, 106 Md. App. at 150, 664 A.2d at 62 (recognizing that even among those trained to administer the HGN test, “the level of competency . . . is wide-ranging” (quoting Stephanie E. Busloff, Note, *Can Your Eyes Be Used Against You? The Use of the Horizontal Gaze Nystagmus Test in the Courtroom*, 84 J. CRIM. L & CRIMINOLOGY 216, 234 (1993))).

We thus agree with the Supreme Court of Tennessee that the HGN test differs substantially from other field sobriety tests:



[T]he HGN test does differ fundamentally from other field sobriety tests because the witness must necessarily explain the underlying scientific basis of the test in order for the testimony to be meaningful to a jury. Other tests, in marked contrast, carry no such requirement. For example, if a police officer testifies that the defendant was unable to walk a straight line or stand on one foot or count backwards, a jury needs no further explanation of why such testimony is relevant to or probative on the issue of the defendant's condition. A juror can rely upon his or her personal experience or otherwise obtained knowledge of the effects of alcohol upon one's motor and mental skills to evaluate and weigh the officer's testimony. However, if a police officer testifies that the defendant exhibited nystagmus, that testimony has no significance to the average juror without an additional explanation of the scientific correlation between alcohol consumption and nystagmus. In effect, the juror must rely upon the specialized knowledge of the testifying witness and likely has no independent knowledge with which to evaluate the witness's testimony.

And there is another distinction between the HGN test and other field sobriety tests, and it concerns measurement. Returning to examples, an officer may testify that the subject performed the "finger to nose" test successfully three out of seven attempts. Once again, no explanation is needed. In contrast, when an officer testifies that the subject's eye movement was rapid and very jerky at less than a 40 degree angle, that officer is testifying about a measurement that probably should be taken with a measuring device. Therefore, the accuracy of this testimony may be questionable in light of the officer's non-scientific measurement of a scientifically measurable phenomenon.

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Tennessee Rule of Evidence 702 states:

If scientific, technical, or other specialized knowledge will substantially assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by

knowledge, skill, experience, training, or education may testify in the form of an opinion or otherwise.

In Tennessee, evidence constitutes “scientific, technical, or other specialized knowledge” if it concerns a matter that “the average juror would not know, as a matter of course. . . .” *State v. Bolin*, 922 S.W.2d 870, 874 (Tenn. 1996). In our view, the average juror would not know, as a matter of course, that a correlation exists between alcohol consumption and nystagmus. *Consequently, testimony concerning the HGN field sobriety test constitutes "scientific, technical, or other specialized knowledge." As such, it must be offered through an expert witness . . . .*

*State v. Murphy*, 953 S.W.2d 200, 202-03 (Tenn. 1997) (emphasis added).

We reject the assertion by the State that Md. Rule 5-702 is inapplicable because Linger did not expressly provide an opinion “as to Blackwell’s state of intoxication.” (Petr.’s Br. 9). Rule 5-702 provides that “[e]xpert testimony may be admitted . . . in the form of an opinion *or otherwise* . . . .” (emphasis added). Thus, on its face, the Rule acknowledges that expert testimony encompasses more than just “opinions.” Furthermore, legal scholars recognize that expert testimony can take the form of certain observations:

When an expert describes firsthand observations in court, this basis testimony is generally still a form of expert testimony. Like ordinary percipient witnesses, such experts are reporting direct sense impressions. Unlike the nonexpert witness, however, the ability to make these observations in the first place typically requires expertise. A treating physician’s description of symptoms, a fingerprint examiner’s testimony about the similarities or differences between two prints he has examined, or an engineer’s description of what he observed when examining the prior art in a patent dispute are all examples of observational testimony that requires specialized knowledge. A lay observer of the same injuries, fingerprints, or inventions

would lack either the vocabulary to describe what she saw with precision or the knowledge of which observations mattered.

DAVID H. KAYE ET AL., *THE NEW WIGMORE: EXPERT EVIDENCE*, § 3.2.1 (2004). Much like the doctor's description of symptoms, or the fingerprint examiner's testimony about the similarities or differences between two prints he has examined — both subjects of expert evidence — Trooper Linger's observations were based upon his specialized knowledge and experience. Accordingly, his testimony about Blackwell's performance on the HGN test was clearly expert testimony within Md. Rule 5-702.

Finally, we shall address the contention by the State that “[a] growing number of jurisdictions have allowed lay opinion testimony by police officers on HGN tests as an indicator of intoxication.” (Petr.'s Br. 25). The State's contention ignores the distinction between its burden to establish the reliability of the test and its burden to show that one is qualified to administer, and thus testify about, the test. Although some courts will admit HGN test results in the absence of expert testimony establishing the test's reliability, i.e., that the test is an indicator of intoxication, the majority of courts recognize that the test is a scientific test. *Schultz*, 106 Md. App. at 151, 664 A.2d at 63 (collecting cases). Furthermore, it is well-recognized that a proper foundation must be established before an officer's observations about a suspect's performance on the test can be admitted into evidence. *Id.*

In *Schultz*, the Court of Special Appeals took judicial notice that the HGN test satisfies the *Frye/Reed* standard, such that it is a valid test for gauging one's state of impairment by the consumption of alcohol. 106 Md. App. at 164-65, 664 A.2d at 69-70. In

so doing, however, the court also held that “the results of HGN testing are admissible in evidence in the courts of this State, *provided the administrator of the test is duly qualified and the testing procedure is conducted properly.*” *Schultz*, 106 Md. App. at 151, 664 A.2d at 63 (emphasis added). We adopt *Schultz* with respect to this latter point,<sup>7</sup> recognizing that it is consistent with what a majority of other jurisdictions require as a foundation for the admission of HGN test evidence. *See, e.g., State ex rel. Hamilton v. City Court*, 799 P.2d 855, 858 (Ariz. 1990) (recognizing that the foundation for admitting HGN evidence must “describ[e] the officer’s education and experience in administering the test and show[] that proper procedures were followed”); *State v. Armstrong*, 561 So.2d 883, 887 (La. Ct. App. 1990) (“[A] proper foundation for admitting the test has been laid when a showing has been made that the officer who administered the test was trained in the procedure, was certified in its administration and that the procedure was properly administered.”); *State v. Baue*, 607 N.W.2d 191, 205 (Neb. 2000) (“[A] police officer may testify to the results of HGN testing if it is shown that the officer has been adequately trained in the administration and assessment of the HGN test and has conducted the testing and assessment in accordance with that training.”); *McLaughlin*, 512 N.W.2d at 708 (noting that the foundation for admitting HGN evidence is “a showing of the officer’s training and experience in administering the test, and a showing that the test was in fact properly administered”); *State v. Bresson*, 554 N.E.2d 1330, 1334 (Ohio 1990) (stating that HGN evidence is admissible “so long as the

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<sup>7</sup>The issues of whether the HGN test satisfies the *Frye/Reed* standard, and whether a court may take judicial notice of that fact, are not presently before us.

proper foundation has been shown both as to the officer's training and ability to administer the test and as to the actual technique used by the officer in administering the test").

That the very foundation for the admission of HGN test evidence is premised on specialized knowledge and training reinforces our conclusion that testimony about one's performance on the test is expert testimony within the purview of Md. Rule 5-702.

Generally, pursuant to Rule 5-702, a trial judge must make a number of legal determinations:

First, the trial court must determine whether the evidence to be presented is a proper subject for expert testimony. The standard for relevance under Maryland common law is whether the jury will receive appreciable help from the expert testimony in resolving the issues presented in the case. *See State v. Allewalt*, 308 Md. 89, 101, 517 A.2d 741, 747 (1986); *Consolidated Mechanical Contractors, Inc. v. Ball*, 263 Md. 328, 338, 283 A.2d 154, 159 (1971).

Before expert testimony is admitted the court must also determine whether the proposed expert is qualified to testify by virtue of education and experience. *See Crews v. Director*, 245 Md. 174, 179, 225 A.2d 436, 439 (1967) (a psychiatrist not licensed to practice medicine in Maryland was permitted, in light of the psychiatrist's extensive professional training and experience, to opine that the appellant was a defective delinquent); *Casualty Ins. Co. v. Messenger*, 181 Md. 295, 298-99, 29 A.2d 653, 655 (1943).

Finally, the proposed expert testimony must be competent, that is, the expert's conclusions must be based upon a legally sufficient factual foundation. *See State Health Dept. v. Walker*, 238 Md. 512, 520, 209 A.2d 555, 559-60 (1965), and cases cited therein.

*Simmons v. State*, 313 Md. 33, 41-42, 542 A.2d 1258, 1262 (1988); *see also Ragland*, 385 Md. at 726, 870 A.2d at 621 (holding that the officers' expert testimonies "should have been

admitted only upon a finding that the requirements of Md. Rule 5-702 were satisfied”). With respect to the first determination, the State must demonstrate that there is a correlation between alcohol consumption and nystagmus. With respect to the last determination, the State must demonstrate that the HGN test was administered properly, in order to reduce the chance that the observed nystagmus was the result of causes other than alcohol. *Schultz*, 106 Md. App. at 180, 664 A.2d at 77.

Furthermore, before HGN testimony can be admitted into evidence the witness must be offered to the court, and accepted by it, as an expert in the field of administering the HGN test. *See Trimble v. State*, 300 Md. 387, 404, 478 A.2d 1143, 1151 (1984) (recognizing that “questions of the qualifications of expert witnesses are for the court to decide as a preliminary matter of law”); MCLAIN, MARYLAND EVIDENCE, § 702:4 (“Before a witness properly may be asked a question that calls for expert testimony, the witness’ qualifications must be proved and the witness proffered to the court and accepted by it . . . as an expert in the relevant field.” (footnote omitted)). This requirement was undoubtedly satisfied in *Wilson, supra*, where prior to the officer testifying about his administration of the HGN test to the defendant, the prosecutor stated, “I would like to ask the court to qualify the witness as an expert in the administration of the HGN test and the interpretation based on his training in this matter.” 124 Md. App. at 548, 723 A.2d at 496. The trial judge replied, “The court will find that the witness is an expert in the administering and also evaluating the results of the horizontal-gaze nystagmys [sic] test . . . .” *Wilson*, 124 Md. App. at 549, 723 A.2d at 496 (alteration in original). The Court of Special Appeals held that “[a]lthough the trooper was

qualified to administer the HGN test and, to that extent, was properly received as an expert, HGN testing may not be used to establish a specific blood alcohol level.” *Wilson*, 124 Md. App. at 553, 723 A.2d at 498.

Here, in contrast to *Wilson*, Trooper Linger was not accepted by the court as an expert. Indeed, the trial judge erred, as a matter of law, in admitting into evidence Linger’s testimony, over objection, about Blackwell’s performance on the HGN test without first making a preliminary legal determination that Linger was qualified to testify as an expert witness. Moreover, Linger’s HGN testimony was admitted erroneously because the State neglected its duty to establish the reliability of the administration of the HGN test. Accordingly, to preserve the distinction between lay and expert testimony, we refuse to allow, as the State attempted here, in derogation of *Ragland*, the proffering of an expert witness in lay witness clothing.

## **B.**

We now consider whether the erroneous admission of Trooper Linger’s expert testimony was unduly prejudicial to Blackwell, the defendant. Relying on *Fields*, 395 Md. 758, 912 A.2d 637, the State asserts that any error by the trial court was harmless in light of the “collective effect of the other evidence.” In *Fields*, we held that evidence that the defendant’s name appeared on the roster of players at a bowling alley where a murder took place would not have had a significant impact on the outcome of the case because there was other compelling evidence of the defendant’s presence at the scene. Our holding in *Fields*, however, did not depart from the oft-cited standard in criminal cases that “error is harmless

if ‘a reviewing court, upon its own independent review of the record, is able to declare a belief, beyond a reasonable doubt, that the error in no way influenced the verdict.’” *Id.* (quoting *Dorsey v. State*, 276 Md. 638, 659, 350 A.2d 665, 678 (1976)).

Here, in contrast to *Fields*, we cannot declare beyond a reasonable doubt that the trial court’s error in no way influenced the guilty verdicts as to the charges of driving a vehicle while under the influence of alcohol and driving a vehicle while impaired by alcohol. Trooper Linger was the State’s sole witness against Blackwell. Although Linger stated that Blackwell had an odor of alcohol on his breath, and that Blackwell’s speech was slurred and his eyes were glassy, Blackwell himself testified that he had not been drinking. In addition, Trooper Linger’s testimony as to Blackwell’s performance on the “walk-and-turn” test was offset by the fact that the officer noted that Blackwell had an injury affecting his balance; the officer did not administer the one-leg stand test because of this injury. Furthermore, there was no evidence presented that Blackwell’s manner of driving was erratic or that he drove his vehicle in violation of any rule of the road; Linger stopped Blackwell’s vehicle for an equipment violation.

Trooper Linger’s description of the HGN test was, by far, the most persuasive component of his testimony. Indeed, courts have noted that the HGN test carries with it an “aura of certainty,” and that jurors may therefore overestimate its probative value. *People v. Leahy*, 882 P.2d 321, 325 (Cal. 1994); *Ruthardt*, 680 A.2d at 361; *see Wilson*, 124 Md. App. at 559, 723 A.2d at 501 (“We cannot ignore ‘the heightened credence juries tend to give scientific evidence . . . .’” (internal citation omitted)). Trooper Linger stated that he was



trained and certified to administer the test, and that he administered the test approximately 150 times during his tenure as an officer. In addition, from Linger's testimony and the State's closing argument, the jury learned that Blackwell exhibited all three "clues" that officers look for when administering the HGN test, and that Blackwell "failed" the test. We cannot say beyond a reasonable doubt that the jury's knowledge of Blackwell's performance on the HGN test, particularly when the prosecution presented very little other evidence of Blackwell's alleged alcohol impairment, in no way influenced the jury's verdict. Accordingly, we shall affirm the judgment of the Court of Special Appeals.

**JUDGMENT OF THE COURT  
OF SPECIAL APPEALS  
AFFIRMED, WITH COSTS.**

**IN THE COURT OF APPEALS**  
**OF MARYLAND**

No. 45

September Term, 2008

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STATE OF MARYLAND

v.

PAUL BENJAMIN BLACKWELL

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Bell, C.J.  
Harrell  
Greene  
Murphy  
Adkins  
Barbera  
Eldridge, John C. (Retired, Specially  
Assigned),

JJ.

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Dissenting Opinion, Murphy, J.

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Filed: May 14, 2009

I agree with the majority and the Court of Special Appeals that “testimony about the HGN test constituted expert testimony,” and “is admissible in evidence pursuant to Md. Rule 5-702.” I do not agree, however, that the Circuit Court admitted the testimony about Respondent’s performance on the HGN test “without first making a preliminary legal determination that [Trooper] Linger was qualified to testify as an expert witness.”

The record shows that the Circuit Court told the prosecutor that, “[i]f you are going to use the horizontal gaze nystagmus test, you must lay a foundation that the witness is qualified to administer it.” The record also shows that the foundational requirements had been satisfied before the Circuit Court stated, “go ahead” to the prosecutor, and overruled the objection to Trooper Linger’s testimony.

It is of no consequence that the Circuit Court did not expressly state that it found Trooper Linger to be an “expert,” because many lawyers and judges strongly believe that it is the better practice for the trial judge to avoid using that term in the presence of the jury. In the case at bar, the Circuit Court in essence stated to the prosecutor, “you may proceed [to present the expert testimony].” I am persuaded that this ruling was neither erroneous nor an unfairly prejudicial abuse of discretion. I would therefore affirm the judgment of conviction.