EPISTEMIC TRESPASSING AND EXPERT WITNESS TESTIMONY

Mark Satta

ATHAN BALLANTYNE recently coined the term *epistemic trespassing* to refer to the act of judging matters outside one's field of expertise. Mikkel Gerken has examined a specific type of epistemic trespassing, *expert trespassing testimony* (i.e., epistemic trespassing via testimony). Based on his conclusion that expert trespassing testimony can be both morally and epistemically problematic, Gerken offers the following guideline: "When S provides expert trespassing testimony in a context where it may likely and/or reasonably be taken to be expert testimony, S should qualify her testimony to indicate that it does not amount to expert testimony."

In this paper, I assess Gerken's guideline—which he calls the "Expert Trespassing Guideline"—as applied to expert witness testimony in a court of law. I conclude that, depending on how it is interpreted, Gerken's guideline either fails to give relevant guidance or gives the wrong guidance when applied to expert witness testimony in court. I argue instead for the following:

No Courtroom Trespassing Principle: Those participating as expert witnesses in legal trials should not make any claim outside their area of expertise if the claim is of the type that normally could only be offered by a properly qualified expert witness.⁴

- Ballantyne, "Epistemic Trespassing," 367. This leads to the question of what counts as "judging matters." I assume that reaching a conclusion by accepting another's testimony does not count as judging the matter for purposes of epistemic trespassing. Rather, epistemic trespassing seems, at its core, to be about relying on oneself to reach a conclusion in an expert domain where one lacks the epistemic foundation for such self-reliance.
- 2 Gerken, "Expert Trespassing Testimony and the Ethics of Science Communication," 299, 300.
- 3 Gerken, "Expert Trespassing Testimony and the Ethics of Science Communication," 299, 301, 310.
- 4 The qualification "of the type that normally could only be offered by a properly qualified expert witness" is necessary because in laying the foundation for expert testimony, an ex-

Following Gerken, the "should" claim in my principle can be read both epistemically and morally. Thus, I will argue that the No Courtroom Trespassing Principle (hereafter sometimes referred to simply as the principle) is true on both an epistemic and a moral reading. As a precursor, I will also argue that the principle is true if its "should" is interpreted legally. I make this legal argument because the legal impermissibility of epistemic trespassing by expert witnesses contributes to the specific social and epistemic conditions of trials that make epistemic trespassing by expert witnesses epistemically and morally impermissible. The legal impermissibility is part, but not all, of what grounds the epistemic and moral impermissibility.

In section 1, I provide relevant background on the US legal system. In section 2, I examine Gerken's guideline. I then argue for my first conclusion, which is that, for both epistemic and moral reasons, my principle rather than Gerken's guideline should be applied to expert witness testimony in court. With that first conclusion in mind, I then argue for the following additional conclusions.

My second conclusion is that judges, litigators, and jurors can often reliably identify at least moderate and severe forms of epistemic trespassing using information standardly provided about expert witnesses, such as their credentials and track record. Here I appeal to the philosophical literature that addresses more general questions about a layperson's ability to identify experts.

Third, judges and litigators should take epistemic trespassing seriously. Judges should deny admission as expert witnesses to those whose testimony would constitute significant expert trespassing testimony and should not permit expert witnesses to make claims that constitute epistemic trespassing. Litigators should not request the admission of epistemic trespassers as expert witnesses and should object when epistemic trespassing occurs on the witness stand. When epistemic trespassers are admitted to testify in court as expert witnesses, litigators for the opposing side should vigorously cross-examine the epistemic trespasser with the aim of revealing their trespassing. Uses of "should" in this paragraph indicate practical advice about what judges and lawyers ought to do when they recognize epistemic trespassing. But this practical advice derives from a more general normative claim: even if a judge were to fail to recognize an expert witness as an epistemic trespasser, it remains the case that, in virtue of the epistemic and moral badness of epistemic trespassing as an expert witness, the witness should not have epistemically trespassed.

Finally, identifiable epistemic trespassing provides jury members with defea-

pert witness may be asked to testify about general background information. Such testimony serves to provide the foundation for later expert testimony but may not itself require expertise to give.

sible evidence against the truth of the claims made by epistemic trespassers. At least three reasons can be given for this: (a) epistemic trespassing counts against the reliability of an expert witness, (b) epistemic trespassing counts against the trustworthiness of an expert witness, and (c) epistemic trespassing counts in favor of the conclusion that no qualified expert may have been willing to make at least some of the trespasser's claims. When I say that something counts against a view, all I mean is that it can serve as a rational ground to lower one's credence or confidence in the view. This is compatible with one believing or having a high credence in the view, so long as other evidence sufficiently counts in favor of the view. Similarly, when I say something counts in favor of a view, all I mean is that it can serve as a rational ground for raising one's credence or confidence in the view. This is compatible with one disbelieving or having a low credence in the view. This is compatible with one disbelieving or having a low credence in the view, so long as other evidence sufficiently counts against the view.

For historically contingent reasons, in recent decades scholarship on expert witness jurisprudence in the United States has focused mostly on the reliability and nature of the *methods* used by expert witnesses.⁵ There has been less focus on the expertise of expert witnesses themselves. Assessing the reliability and nature of an expert's method is important, but focusing on method alone misses some important issues related to expert witness testimony. In assessing potential expert witnesses, we should look at both the reliability of the methods they rely on and the nature of their expertise. The examination of one need not, and should not, come at the exclusion of the other. This paper is written primarily with the Us federal legal system in mind, but the epistemic and moral spirit of the conclusions reached applies to Us state judiciaries and many other national judiciaries as well.

1. EXPERT WITNESSES IN US LAW

Before turning to the philosophical questions, it will be useful to have in mind some information about us federal law concerning expert witnesses. While us evidence law is imperfect, my goal here is not to critique us evidence law. Rather, current evidence law forms part of the backdrop from which I address how expert witnesses and other individuals should behave, both epistemically and morally. Current evidence law affects what one epistemically should do in court because current evidence law helps shape our social and epistemic expectations during trials. If the law were different (and, as a result, our social and epistemic expectations during trials were different), then perhaps what actors epistemically should do in court might be different too. Thus, my paper should be under-

⁵ For more information on the history of us evidence law, see Haack, "The Expert Witness."

stood as advocating a set of behaviors in court that are rooted in epistemic and moral reasons that account for the way the law is.

Federal law permits two types of witnesses to testify at trial: lay witnesses and expert witnesses. Lay witnesses are admitted to testify about relevant knowledge acquired by personal perception (e.g., having witnessed someone running from a crime scene). In contrast, expert witnesses are admitted to testify about relevant matters by virtue of their expertise acquired through "knowledge, skill, experience, training, or education." Expertise includes scientific, technical, and other specialized knowledge. In order to be qualified to testify as an expert witness, an expert's testimony must (a) help the trier of fact understand the evidence or determine a fact at issue, (b) be based on sufficient facts or data, (c) be the product of reliable principles and methods, and (d) be an instance of the expert reliably applying the principles or methods to the facts in the case.

In recent times, Us federal evidence law for the admission of expert witness testimony has been guided by two key precedents. The first, the *Frye* test, held that a scientific technique is admissible only when the technique is generally accepted as reliable in the relevant scientific community. This test was superseded by the Us Supreme Court's 1993 decision in *Daubert v. Merrell Dow Pharmaceuticals Inc.*, which enacted a more "flexible" test that focused "solely on principles and methodology." Factors to be considered under *Daubert* include whether the relevant theory or technique has been tested and whether it has been vetted through peer-reviewed publication. ¹³

Much of the scholarship about us evidence law has focused on interpreting the older *Frye* test and the newer *Daubert* standard. Neither test is directly about what makes someone a relevant expert. Rather, both tests are about the methods used as the basis for expert witness testimony. As a result, us expert witness law scholarship has tended to focus on an expert witness's methodology rather than their purported expertise. But this attention to techniques and methods does not mean the law does not require that expert witnesses be experts in the relevant fields. It does.

- 6 Fed. R. Evid. 701, 702.
- 7 Fed. R. Evid. 602, 701.
- 8 Fed. R. Evid. 702; cf. Civ. Pro. R. 35 for the standards for expert witness testimony in England and Wales.
- 9 Fed. R. Evid. 702; see also, Kumho Tire Co. v. Carmichael, 526 U.S. 137 (1999).
- 10 Fed. R. Evid. 702 (a)-(d).
- 11 Frye v. United States, 293 F. 1013, 1014 (D.C. Cir. 1923).
- 12 Daubert v. Merrell Dow Pharmaceuticals, Inc., 509 U.S. 579, 594-95 (1993).
- 13 Daubert, 509 U.S. at 593.

We can see this first by looking at how various courts have interpreted and applied the *Daubert* standard. For example, on remand after the Supreme Court's holding in *Daubert*, the Us Court of Appeals for the Ninth Circuit held that "one very significant fact to be considered is whether the experts are proposing to testify about matters growing naturally and directly out of research they have conducted independent of the litigation." The Ninth Circuit then clarifies as follows: "That an expert testifies based on research he has conducted independent of the litigation provides important, objective proof that the research comports with the dictates of good science." Here the Ninth Circuit put forward a standard even higher than that the expert simply be an expert in the relevant field. Rather, the court takes as a "very significant fact" that an expert's research be directly related to the relevant matters. If this higher standard is a very significant factor to be considered, than *a fortiori* so is the more general requirement that one be an expert in the relevant field to begin with.

Similar ideas can be seen in the US Court of Appeals for the Seventh Circuit's ruling that an expert witness should be "as careful as he would be in his regular professional work outside his paid litigation consulting" and the Supreme Court's statement that before admitting an expert witness the trial court judge should be assured that the expert "employs in the courtroom the same level of intellectual rigor that characterizes the practice of an expert in the relevant field." ¹⁶

The need for an expert witness to be an expert in the relevant field is stated even more clearly in the Advisory Committee Notes for the 2000 amendment to the Federal Rules of Evidence. The notes state that "the expert's testimony must be grounded in an accepted body of learning or experience *in the expert's field*, and the expert must explain how the conclusion is so grounded."¹⁷

To help show how high the stakes can be when expert witnesses engage in epistemic trespassing, consider an example. ¹⁸ In 1988, Curtis Weeks was being transferred from one Texas prison to another. Weeks, who was HIV positive,

- 14 Daubert v. Merrell Dow Pharmaceuticals, Inc., 43 F.3d 1311, 1317 (9th Cir. 1995).
- 15 Daubert, 43 F.3d at 1317.
- 16 Sheehan v. Daily Racing Form, Inc. 104 F.3d 940, 942 (7th Cir. 1997); Kumho Tire Co. v. Carmichael, 526 US 137, 152 (1999).
- 17 Mueller and Kirkpatrick, Federal Rules of Evidence with Advisory Committee Notes and Legislative History, 175; emphasis added.
- 18 In the example that follows, Daubert would not have been binding precedent both because Daubert had not yet been decided at the time of the trial and because Texas evidence law rather than federal evidence law would have been applied. But the philosophical arguments in this paper do not apply solely to trials that are subject to Daubert or Frye, so the inapplicability of Daubert is not a shortcoming in using this trial as an example of epistemic trespassing in action.

tried to escape en route. During his attempted escape he declared that he was "going to take somebody with him" and spat twice on the face of a prison guard. For this, Weeks was convicted of attempted murder by the state of Texas.¹⁹

At the time of Weeks's trial, as now, attempted murder in Texas requires that the perpetrator commit an act that "could have caused the death of the complainant but failed to do so." Saliva does not transmit HIV. And no one has ever seroconverted because someone living with HIV spat on them. Weeks could not have committed attempted murder simply by spitting on the prison guard because his action could not have caused the death of the complainant. Yet, a jury convicted Weeks, and his conviction was upheld by a Texas Appeals Court, US District Court, and US Appellate Court.

Enough was known about the transmission of HIV at the time of Weeks's conviction that the American Civil Liberties Union and the Texas Human Rights Foundation requested on appeal that the court take judicial notice of the fact that "it is impossible to transmit the virus which causes AIDs by spitting." They made their request under the Texas Rules of Criminal Evidence, which defined a judicially noticed fact as "one not subject to reasonable dispute in that it is ... capable of accurate and ready determination by resort to sources whose accuracy cannot reasonably be questioned." ²⁵

The appeals court denied the request and upheld the conviction on the grounds that "the jury chose to believe the [expert] witnesses who testified that HIV could be transmitted through saliva." The court's ruling attests to the influence that expert witness testimony can have on the outcome of trials. It also attests, as will be shown shortly, to the ability of expert witnesses to abuse their privilege of testifying via epistemic trespassing.

At Weeks's trial, four individuals were admitted to testify as "experts on HIV." 27

- 19 See Weeks v. State, 834 S.W.2d 559, 560-61 (Tex. App. Eastland 1992).
- 20 See Flanagan v. State, 675 S.W.2d 734 (Tex. Cr. App. 1984).
- 21 See, e.g., Centers for Disease Control and Prevention, "HIV Transmission," https://www.cdc.gov/hiv/basics/transmission.html.
- 22 Cresswell, Ellis, Hartley, et al., "A Systematic Review of Risk of HIV Transmission through Biting or Spitting."
- 23 Weeks v. State, 834 S.W.2d 559, 560–61 (Tex. App. Eastland 1992); Weeks v. Collins, 867 F.Supp. 544 (SD Tex. 1994); Weeks v. Scott, 55 F.3d 1059 (5th Cir. 1995).
- 24 Weeks, 834 S.W.2d at n2.
- 25 Weeks, 834 S.W.2d at n2. The appeals court acknowledged that "Many of the AIDS experts express the opinion that it is impossible to transmit HIV through saliva," but declined to take judicial notice claiming that the matter had not been "conclusively established."
- 26 Weeks, 834 S.W.2d at 565.
- 27 Weeks, 834 S.W.2d at 562. This citation and the following are from the descriptions of the

Three were for the prosecution and one for the defense. The first witness for the prosecution, Mark E. Dowell, holds an MD and was at the time an infectious diseases physician at Baylor College of Medicine. Dowell testified that "the medical community is uncertain as to whether HIV could or could not be transmitted through saliva." He also testified that in a study that tested whether HIV would grow in saliva found that "the virus developed in 3 out of 55 instances," and that he had "seen one report which indicated that there was some 'inhibitor' effect of saliva to HIV." Still, he concluded that "the possibility is low but certainly not zero" that HIV could be transmitted by spitting. 30

The prosecution's second witness, Paul Drummond Cameron, holds a PhD in psychology and works (both at the time of the trial and now) at the Family Research Institute, a nonprofit that he founded. Cameron, who had been expelled from the American Psychological Association in 1983, does not have training in medicine or the life sciences.³¹ The basis for Cameron's admission as an expert witness is unclear, aside from his own testimony that "a goodly amount" of his time was devoted to literature research, including literature on HIV/AIDS.³² Cameron made claims much stronger than, and contradictory to, Dowell's. Cameron testified that "most experts agree that there has been approximately ten cases of transmission [of HIV] through saliva" and that in his opinion "a person could become infected with HIV by being spit on."³³

The prosecution's third witness, Lorraine Day, holds an MD and at the time was an orthopedic surgeon at San Francisco General Hospital. Day "admitted that she has not specialized in internal medicine and has not had any formal training in infectious diseases." The grounds for her admission as an "expert on HIV," aside from general medical training, seem to be that she had "begun researching AIDs on her own." Like Cameron, Day's testimony contradicted

witnesses provided in the Texas Court of Appeals's opinion upholding Weeks's conviction.

²⁸ Weeks, 834 S.W.2d at 562.

²⁹ Weeks, 834 S.W.2d at 562.

³⁰ Weeks, 834 S.W.2d at 562. Given his assertion that "the medical community is uncertain whether HIV could or could not be transmitted through saliva," the only reading of this claim that would seem to allow for consistency is if Dowell meant the *epistemic* possibility was low but not zero. The record provides no clarification on this point.

³¹ Siegel, letter from Max Siegel on behalf of the American Psychological Association to Paul Cameron.

³² Weeks, 834 S.W.2d at 562.

³³ Weeks, 834 S.W.2d at 563.

³⁴ Weeks, 834 S.W.2d at 564.

³⁵ Weeks, 834 S.W.2d at 564.

Dowell's claim that "the medical community is uncertain as to whether HIV could or could not be transmitted through saliva." Day claimed that there were "documented cases of saliva transmission of the HIV virus [sic]" and that "it was possible that the complainant could contract HIV if appellant spit his saliva onto the complainant's face." 36

The fourth witness, Richard B. Pollard, was the only expert witness for the defense. Pollard holds an MD and at the time was a professor of internal medicine and microbiology at the University of Texas Medical Branch at Galveston and director of the Diagnostic Virology Laboratory at the University of Texas.³⁷ Pollard testified that he was board certified in internal medicine, specialized in infectious disease, and had eleven years of "training and experience in the area of virology."³⁸ As part of his work, Pollard "directed a research program active in both clinical and scientific research focused upon infections with HIV" and "sat on a national panel which looks at all the drug studies conducted by the National Institute [sic] of Health for the treatment of AIDS infections."³⁹

Pollard stated that it had never been shown that HIV could be transmitted by saliva and that he was "unaware of anyone acquiring HIV as the result of contact with only saliva." He provided rebutting explanations for the instances of HIV transmission by saliva put forward by Cameron and Day. He also provided information that gave greater context for Dowell's testimony, stating that "the HIV which is present in saliva is actually inactive."

Weeks's case provides us with a paradigmatic example of epistemic trespassing by expert witnesses to various degrees. There is the particularly egregious epistemic trespassing of Cameron, whose credentials give him no special ability to make judgments about HIV whatsoever. There is the slightly less blatant epistemic trespassing of Day, who by virtue of her medical training is better positioned to assess the relevant facts than your average layperson, but who went

- 36 Weeks, 834 S.W.2d at 563, 564. Given how blatant Day's and Cameron's epistemic trespassing was, one may think that the real issue here was their testifying in bad faith, not their being epistemic trespassers. It may be the case that Day and Cameron were testifying in bad faith, but that is compatible with their being epistemic trespassers. Regardless of what beliefs or intentions Day and Cameron had when testifying, the claims they asserted qualify them as issuing judgments beyond their competence. The issuing of these judgments outside their areas of expertise while on the witness stand as expert witnesses is an irreducible part of what went wrong here.
- 37 Weeks, 834 S.W.2d at 562.
- 38 Weeks, 834 S.W.2d at 564.
- 39 Weeks, 834 S.W.2d at 564.
- 40 Weeks, 834 S.W.2d at 564.
- 41 Weeks, 834 S.W.2d at 564.

far beyond her area of specialization as an orthopedic surgeon in offering judgments about the transmission of HIV. There is also perhaps a subtle form of epistemic trespassing on the part of Dowell. He has medical training and, unlike Day, specializes in infectious diseases. But there is no evidence in the record that he had ever done scientific research on HIV/AIDS. This may have resulted in gaps in his knowledge, such as Pollard's claim that HIV in saliva is inactive. Finally, there is Pollard, who is a good example of someone with the relevant kind of targeted expertise that an expert witness should have. His credentials are narrowly tailored to provide him with the relevant kind of expertise and he has an active research agenda in the relevant area.

As Weeks's case shows, jurors do not always identify epistemic trespassing or make sound judgments that follow from such recognition. Given this, I will argue that the No Courtroom Trespassing Principle provides better guidance for expert witness testimony than does Gerken's guideline, which only advocates that the testifier qualify their trespassing claims to indicate that they are nonexpert claims. I will also later argue that the judge, litigators, and jurors had the tools needed to identify the epistemic trespassing in this case. As a result of this epistemic trespassing, the judge should have denied Cameron and Day the opportunity to testify. If there was epistemic trespassing on the part of Dowell, it was subtle enough that he should have been allowed to testify as an expert witness. However, it would have been prudent for opposing counsel to cross-examine Dowell with the goal of highlighting where his expertise fell short in comparison to Pollard's.

2. GERKEN'S EXPERT TRESPASSING GUIDELINE

As stated earlier, Mikkel Gerken offers the following guideline.

Expert Trespassing Guideline: When S provides expert trespassing testimony in a context where it may likely and/or reasonably be taken to be expert testimony, S should qualify her testimony to indicate that it does not amount to expert testimony.⁴²

Gerken states that this guideline "articulates a *prima facie* moral obligation." This obligation flows from Gerken's assumptions that it is "morally problematic to put someone in an epistemically inhospitable circumstance, if this could easily have been avoided" and that expert trespassing testimony in the circumstances

⁴² Gerken, "Expert Trespassing Testimony and the Ethics of Science Communication," 310.

⁴³ Gerken, "Expert Trespassing Testimony and the Ethics of Science Communication," 310.

the guideline addresses are likely to create epistemically inhospitable circumstances—i.e., circumstances that undermine a subject's ability to form truth-conducive beliefs. ⁴⁴ Thus, for Gerken the moral problem with epistemic trespassing is rooted, at least in part, in an epistemic problem with epistemic trespassing. ⁴⁵

Assuming that the "when" in Gerken's guideline can be treated as equivalent to "if," Gerken's guideline is a conditional that outlines something one must do if one offers expert trespassing testimony. Gerken's guideline does not advocate for expert trespassing testimony; it only comments on what should occur when it happens. Even recognizing this, there is an ambiguity in Gerken's guideline between what I will call the *absolution reading* and the *mitigation reading*.

On the absolution reading, so long as a subject qualifies their testimony to indicate that it does not amount to expert testimony, then the subject is absolved of moral or epistemic wrongdoing. On this reading, qualification either renders the trespassing permissible or renders it no longer trespassing to begin with.

In contrast, on the mitigation reading, a subject's testimony can remain morally and epistemically impermissible even if they qualify their testimony. On this reading, the guideline's consequent merely articulates a new obligation that one incurs in virtue of committing an epistemic trespass. The trespasser can remain guilty of the epistemic trespass, but their guilt may be mitigated (or at least not increased) by the ameliorative action of qualifying their testimony.⁴⁶

I need not settle the question of which interpretation Gerken intended. If one adopts an absolution reading of Gerken's guideline, the No Courtroom Trespassing Principle entails that Gerken's guideline gets matters wrong in the case of expert witness testimony. Qualification does not absolve the expert witness who engages in epistemic trespassing. If one adopts a mitigation reading of Gerken's guideline, the No Courtroom Trespassing Principle entails that Gerken's guideline is largely irrelevant in cases of expert witness testimony because there should be no epistemic trespassing by expert witnesses in a court of law to begin with.⁴⁷

- 44 Gerken, "Expert Trespassing Testimony and the Ethics of Science Communication," 307, 304.
- 45 Gerken, "Expert Trespassing Testimony and the Ethics of Science Communication," 301.
- The guideline "If S engages in a hit and run, then S should call 911 as they drive away from the scene of the accident" is an example of a mitigation guideline rather than an absolution guideline. Calling 911 while driving away from an accident does not absolve a hit-and-run driver of guilt for leaving the scene, but it remains the case that if the driver is going to do so, at the very least they should call 911 to get first responders to the scene. This is very different from a principle like, "If you are going to go onto another's private property, then you should secure permission from the owner in advance." This latter principle is an absolution principle. If you get permission from the owner, going onto their private property is no longer a wrong at all.
- 47 I specify *largely* irrelevant because there are select circumstances under which the guideline could still be of use. For example, if an expert witness catches themselves accidentally of-

Thus, in arguing for the No Courtroom Trespassing Principle, I simultaneously am arguing that in the context of epistemic trespassing by expert witnesses Gerken's guideline is either wrong or largely irrelevant, depending on how it is interpreted.

3. EXPERT WITNESSES SHOULD NOT COMMENT ON MATTERS OUTSIDE THEIR EXPERTISE

In this section, I argue that instead of Gerken's guideline, the primary operative principle in cases of epistemic trespassing by expert witnesses in a court of law is the following.

No Courtroom Trespassing Principle: Those participating as expert witnesses in legal trials should not make any claim outside their area of expertise if the claim is of the type that normally could only be offered by a properly qualified expert witness.

I begin by looking at Gerken's arguments for his guideline in more detail in order to shed light on why the guideline is largely inapplicable in cases of epistemic trespassing by expert witnesses in court.

To motivate his position, Gerken considers two hypothetical cases. In the first case, a meteorologist with a specialization in atmospheric composition is interviewed about global warming by a local news station. During the interview, she answers a question about the impact of global warming on marine life, which is a topic outside her area of specialization. In the second case, a cognitive psychologist specializing in color vision is serving as an expert witness in court. During cross-examination, she makes claims about the significance of the defendant's troubled social environment, which is a topic outside her area of specialization. Gerken's guidelines suggests that the proper remedy in both cases would have been for the speakers to qualify their statements to indicate that they were not speaking in their capacity as experts (e.g., "This is outside the bounds of my expertise, but I think that ...").

Gerken's guideline may be a sensible remedy for the meteorologist faced with an interview question that covers ground beyond her area of expertise; this seems to be the kind of case Gerken is most concerned with. But his guideline is insufficient when it comes to what the cognitive psychologist should do when tempted to speak about matters outside her area of expertise while on the stand. What the

fering trespassing testimony, their best course of action is to qualify their testimony in the way Gerken's guideline advocates. But the relevance here is in rectifying a mistake, not in deciding what testimony to offer in the first place.

⁴⁸ Gerken, "Expert Trespassing Testimony and the Ethics of Science Communication," 300-1.

speaker in this second case must do is avoid making any claims that (i) normally could only be made by a qualified expert witness, and (ii) fall outside of her area of expertise. This is what the No Courtroom Trespassing Principle requires.

Various epistemic and moral considerations support the No Courtroom Trespassing Principle. Here I offer two epistemic reasons and three moral reasons for the principle, but because some of those reasons depend in part on the legal status of expert trespassing testimony and the social expectations bound up with that status, I begin with a legal observation about Gerken's guideline.

One can see that Gerken's guideline does not satisfy the legal requirements for expert witness testimony by noticing that as soon as an expert witness tries to qualify a claim in the way that Gerken suggests ("I'm not an expert on this matter, but ..."), opposing counsel ought to object to the witness continuing their statement because the testimony would be inadmissible. Expert trespassing testimony is simply not the kind of thing that the witness is permitted to say. ⁴⁹ This legal observation is relevant to my epistemic and moral arguments in two ways. First, the rules of evidence—which include the rules about expert witness testimony—serve epistemic and moral goals. Such rules are meant to provide jurors with information that will help them reach accurate conclusions.⁵⁰ Seeking to provide jurors with information that will help them reach accurate judgments in turn is meant to serve the moral aim of making trials fair and just.⁵¹ Second, an understanding of the rules of evidence may naturally influence how one interprets evidence, including testimony. If one understands that judges should allow only relevant evidence before jurors, one may naturally treat a judge's choice to permit testimony as evidence that it is relevant. 52 If one understands that someone is testifying as an expert witness, one may naturally conclude that an expert witness's testimony reflects expertise and as a result should be given deference.⁵³

My two epistemic reasons for the No Courtroom Trespassing Principle correspond to these two legal observations. The first reason is a first-order consideration about the reliability of the witness's statements. The second reason is a second-order consideration about the epistemic value attached to expert witness testimony via the social conditions of trials.

Concerning reliability, recall that in order for an expert witness's testimony

- 49 This is the rule for substantive claims made for the truth of the matter asserted. This does not extend to things such as answering questions required to lay the foundation for later testimony or to answering questions aimed at assessing the expert's credibility.
- 50 See Fed. R. Evid. 102.
- 51 See Fed. R. Evid. 102.
- 52 See Fed. R. Evid. 402.
- 53 See Fed. R. Evid. 702.

to be admissible the testimony must be "the product of reliable principles and methods" and the expert must have "reliably applied the principles and methods to the facts of the case." This is an epistemic standard set by the Federal Rules of Evidence. Reliability comes in degrees. Thus, there is a need to establish a threshold at which expert witness testimony is expected to be reliable enough that it is admissible. The threshold set by the Federal Rules of Evidence is that the expert witness must be at least as reliable a testifier as a competent expert within the field of expertise being called upon. After all, it needs to be the case that the witness "employs in the courtroom the same level of intellectual rigor that characterizes the practice of an expert in the relevant field." 54

This threshold gets things right epistemically. If the criteria for testifying as an expert witness were higher, too few experts would be allowed to testify in court. This would come at the cost of jurors missing out on expert testimony that is likely to be relevant and reliable. But if the criteria for testifying as an expert witness were lower, it would be too easy for unreliable testimony to be presented to jurors. This would come at the cost of jurors gaining misleading testimony from unreliable witnesses. Applying this standard to the example of Weeks's prosecution, Cameron and Day fail to meet this threshold as a psychologist and orthopedic surgeon, respectively. Pollard and Dowell meet the standard as practicing MDs with training in infectious diseases. Epistemically, this seems like the correct result.

There is a second reason why it is epistemically problematic to allow an expert witness to testify beyond the scope of their expertise. This reason is rooted in the social conditions of a trial and the role that expert witnesses play within that structure. Because expert witnesses are put on a pedestal (sometimes literally) as experts, jurors are rational in giving substantial deference to the claims made by those testifying as expert witnesses. This can include a juror's subordination of their own intuitions or judgments in favor of those made by the expert witness. However, when an expert witness engages in epistemic trespassing, this sort of deference is no longer deserved. When expert witnesses engage in expert trespassing testimony on the stand, they *mislead* their audience about the lack of authority for their claims. This creates misleading higher-order evidence for jurors.⁵⁵

At this point, a reader might agree that the social conditions of trials create a problematic risk of an expert witness's trespassing testimony being mistaken for true expert testimony. They might also agree that this creates misleading higher-order evidence for jurors that may cause them to give unwarranted deference

⁵⁴ Kumho Tire Co. v. Carmichael, 526 U.S. 137, 152 (1999).

The same may apply to a judge in a bench trial. In this paper, I have generally glossed over this distinction and treated "jurors" as synonymous with "triers of fact."

to the testifier. But they might disagree that this requires the No Courtroom Trespassing Principle. They may think instead that Gerken's guideline that an expert should qualify their testimony to indicate that it does not amount to expert testimony is a sufficient remedy. After all, if the expert witness clarifies on the particular point that they are not an expert, should not that be sufficient to avoid the creation of misleading higher-order evidence?

While this is a reasonable suggestion, ultimately I think it fails for the following reasons. First, for this suggestion to be effective, jurors must properly take note of the qualification and its scope. Given the hours of sustained attention that trials often require of jurors, it would be easy for jurors to fail to register, process, and later account for such a qualification. That someone was presented as an expert witness is easier to remember than where and when that witness qualified their testimony to indicate that they were speaking beyond their area of expertise. Thus, there is a substantial risk that qualifications will not stop jurors from concluding that trespassing testimony delivered by expert witnesses was genuine expert testimony.

Second, and perhaps more importantly, an expert witness who (1) testifies about a matter that normally requires expertise, (2) qualifies to indicate that their testimony is not expert testimony, but (3) is allowed to proceed with the testimony anyway will always create conflicting higher-order evidence by virtue of the rules of expert witness testimony. This is because to testify as an expert witness about a matter that normally requires expertise is to create higher-order evidence that one is a relevant expert. Qualifying one's claims in an attempt to indicate otherwise is at best only partial refutation of that evidence, because the rules of the activity require that if all the relevant parties (which include the judge and litigators) act on such a qualification, the testifier would be prohibited from offering the trespassing testimony. This is an important way in which the expert witness case differs from the television interview case. While in the television interview case, the expert may have been invited to speak because they have expertise, there is no requirement that the expert speak only about matters within their expertise. But in the expert witness case, there are such requirements. The model for admitting evidence—including testimony—during a trial is an opt-in model. That is to say, evidence is presumed inadmissible unless it meets the relevant criteria. In the case of expert witness testimony, those criteria include that the evidence is relevant and that the testimony is delivered by a properly qualified expert. For a juror who is aware of this, the testimony of an expert witness on a matter that requires expertise will always be evidence that the testimony is that of an expert. Such evidence of expertise cannot be completely eliminated by qualification in court, even if it can be in many other contexts.

In sum, there are strong epistemic reasons to ban even qualified epistemic trespassing by expert witnesses. These reasons include that such testimony is more likely to be unreliable than testimony delivered by actual experts and that such testimony will generate misleading higher-order evidence about the strength of the testimony, even if the testifier qualifies their testimony in order to try to indicate that they do not have expertise about the matter for which they are testifying. The ineffectiveness of such qualification is rooted in the rules about when testimony is admissible at trials and the social conditions such rules and knowledge of them creates.

These epistemic reasons not to epistemically trespass as an expert witness give rise to moral reasons not to trespass. First, given the significant stakes that typically accompany the outcome of a trial, the creation of misleading evidence at trial can have severe consequences. Think, for example, of Weeks's conviction for attempted murder based on expert trespassing testimony. Second, epistemic trespassing by expert witnesses shows disrespect to the epistemic agency of the jurors who are tasked with the weighty challenge of issuing just and epistemically defensible verdicts. Epistemic trespassing by expert witnesses undermines the ability of jurors to perform their civic duty as well as possible. Third, as noted earlier, the admission of testimony at trial occurs on an opt-in basis. It is a privilege, not a right, to testify as an expert witness in a trial. It is an abuse of that privilege to engage in epistemic trespassing while on the stand as an expert witness. It is also fundamentally unfair because it bypasses the normal restrictions on who is given the privilege of testifying before the jury.

In summary, while some cases of expert trespassing testimony may be permissible so long as the expert appropriately qualifies their statement, this is not true in the context of expert witness testimony. Rather, there are important epistemic and moral reasons why expert witnesses should not make even qualified claims that go beyond the scope of their expertise.

4. HOW JUDGES AND LITIGATORS CAN IDENTIFY AND ADDRESS EPISTEMIC TRESPASSING

In a perfect world, experts would closely monitor themselves and scrupulously avoid epistemic trespassing. But in a legal system like that in the United States, where expert witnesses are paid by the parties for their testimony, experts may be tempted to engage in epistemic trespassing in order to provide testimony to the liking of those paying for the testimony. As a result, judges, litigators, and jurors should watch for epistemic trespassing.

In this section, I aim to do three things. First, I provide more detail about

what I mean by expertise. Second, I appeal to the philosophical literature on layperson recognition of experts to suggest strategies that judges, lawyers, and jurors can use to more reliably identify epistemic trespassing. Third, I offer some recommendations for how judges and litigators should respond to epistemic trespassing. I then consider what jurors ought to do about epistemic trespassing.

4.1. Describing Expertise and Epistemic Trespassing

Because epistemic trespassing is defined in terms of judging matters outside one's field of expertise, we need an understanding of what constitutes a field of expertise. The first thing to notice is that no one is an expert writ large. Expertise is always indexed to a particular area of expertise. Following Gerken, I will generally refer to an area of expertise as a domain. Thus, the relevant question in determining whether someone is a relevant expert is never simply "Is S an expert?" but always "Is S an expert in domain D?"

For our purposes, the boundaries of a domain are determined by a fixed set of related questions or topics.⁵⁷ Sometimes a domain's scope will be coextensive with the scope of an academic discipline (e.g., physics, sociology, Russian studies). Often it will be narrower. For example, in Gerken's case of the cognitive psychologist specializing in color vision, her expertise in that area of psychology does not provide her with the requisite level of expertise to testify as an expert witness on matters within the domains of social or developmental psychology.⁵⁸ In other cases, the relevant domain of expertise may cut across related disciplinary lines. For example, specialized knowledge regarding the best soil conditions for growing crops is a domain of expertise whose experts may occupy positions within the academic disciplines of either agronomy or botany.⁵⁹

Treating "field" and "domain" as interchangeable, I follow Ballantyne in holding that someone counts as an expert only if they possess "first, enough relevant evidence to answer reliably or responsibly their field's questions; and, second, enough relevant skills to evaluate or interpret the field's evidence well." Here

- 56 See Ballantyne, "Epistemic Trespassing," 370-71.
- 57 See Ballantyne, "Epistemic Trespassing," 370.
- 58 See Gerken, "Expert Trespassing Testimony and the Ethics of Science Communication," 301.
- 59 Ballantyne makes a similar point about unclear boundary lines between disciplines using the example of biochemistry and molecular biology ("Epistemic Trespassing," 370–1).
- 60 Ballantyne, "Epistemic Trespassing," 371. This description of expertise in terms of relevant (i) evidence and (ii) skills aligns well with Elizabeth Anderson's description of assessments of expertise as about whether purported experts "have access to the evidence and the skills to evaluate it" ("Democracy, Public Policy, and Lay Assessments of Scientific Testimony," 145).

are three points to note about this definition. First, this description of expertise aligns with the Federal Rules of Evidence in that it incorporates a reliability condition into the necessary criteria for expertise. Second, in order to possess the kinds of evidence and skills required for expertise, one will, as a practical matter, typically require specialized experience, training, or education. Such experience, training, or education is usually verifiable using documentary evidence. Third, epistemic trespassing can come in degrees because one can be more or less reliable or responsible in answering a domain's questions and can have more or less relevant skill in evaluating a domain's evidence. ⁶¹

For example, say that a jury would benefit from expert witness testimony about chronic diseases of the intestinal tract. Having an MD who practices family medicine testify rather than a gastroenterologist might constitute a small degree of epistemic trespassing. Having a brain surgeon testify might constitute a greater degree of epistemic trespassing than having either the family medicine doctor or the gastroenterologist testify. But having someone with no medical training at all testify would, all else equal, constitute a far greater degree of epistemic trespassing than either the brain surgeon's testimony or the family medicine doctor's testimony.

We can think of the severity of epistemic trespassing as falling on a spectrum. At one end of the spectrum is subtle epistemic trespassing. Subtle epistemic trespassing occurs when the trespasser, while lacking expertise in the most relevant domain, has expertise in a related domain that is likely to make the trespasser more reliable than the average layperson while still less reliable than the average true expert. At the other end of the spectrum is egregious epistemic trespassing. Egregious epistemic trespassing occurs when any expertise that the trespasser may have is so far removed from the relevant area of expertise that the trespasser is no more reliable than the average layperson. Moderate cases of epistemic trespassing fall in between subtle and egregious cases of trespassing.

As a general matter, the more egregious the trespass, the more likely it is that the testimony will fail to be reliable. Consider that while both the brain surgeon and I may be engaging in epistemic trespassing if testifying as an "expert witness" about complex medical facts regarding a plaintiff's colon, the brain surgeon is still a far more reliable source of information than I am, all else equal, given that I have no training in medicine. The good news is that it is also the case that, as a general

61 There is a reading of Ballantyne's description of epistemic trespassing whereby the presence of the word "enough" in both clauses transforms the definition into an in-or-out category that does not come in degrees. But I do not think such a reading is best suited to thinking about expertise in the context of expert trespassing testimony. It seems to me that "enough" is likely a context-sensitive property. But even if "enough" is not taken to be context sensitive, one can be closer or further from having enough of property *X*, and thus closer or further from being an expert.

matter, the more egregious the epistemic trespass, the easier it will be to spot. Thus, even if the suggestions I offer in the next subsection make identifying subtle instances of epistemic trespassing challenging, I argue that they are often sufficient to catch most instances of moderate and egregious epistemic trespassing, which will generally be the instances where the most unreliable testimony is offered.

4.2. Guidelines for Identifying Epistemic Trespassing

In the last few decades, multiple scholars have theorized about laypeople's abilities to assess expert testimony. 62 Of concern across these readings is the issue of how optimistic we should be about lay assessments of expert testimony. The level of optimism shown by these writers is mixed. 63 But when it comes to applying the methods put forward by these authors to the issue of epistemic trespassing by expert witnesses, we have some reason to be optimistic. This is because the question one needs to ask in order to spot an epistemic trespasser—namely, is S an expert in domain D?—is much simpler to answer than questions about assessing the truth or other qualities of a purported expert's testimony that these other writers are primarily concerned with.

Assessing whether someone is an epistemic trespasser does not require that one assess whether the epistemic trespasser's claims are true. Nor does it require that one assess which expert to trust in the face of competing expert testimony. This paper does not offer answers to questions such as Alvin Goldman's "Can novices, while remaining novices, make justified judgments about the relative credibility of rival experts?" or Elizabeth Anderson's "Given that ordinary citizens cannot directly assess [complex scientific] reasoning, does this call the democratic legitimacy of technical public policies in question?" But it does appeal to the methods put forward by Goldman and Anderson for determining whether someone is an expert in a given domain.

In the remainder of this subsection, I argue that in many cases all one needs to determine whether or not a purported expert witness is engaging in, or plans

- 62 See, e.g., Brewer, "Scientific Expert Testimony and Intellectual Due Process"; Goldman, "Experts"; Anderson, "Democracy, Public Policy, and Lay Assessments of Scientific Testimony"; Lane, "When the Experts Are Uncertain"; Guerrero, "Living with Ignorance in a World of Experts"; Brennan, "Can Novices Trust Themselves to Choose Trustworthy Experts?"; and Watson, Expertise.
- 63 For example, Lane writes: "Can ordinary citizens in a democracy evaluate the claims of scientific experts? While a definitive answer must be made case by case, some scholars have sharply opposed general answers: a skeptical 'no' (e.g. Scott Brewer) versus an optimistic 'yes, no problem' (e.g. Elizabeth Anderson)" ("When the Experts Are Uncertain," 97).
- 64 Goldman, "Experts," 89; Anderson, "Democracy, Public Policy, and Lay Assessments of Scientific Testimony," 144.

to engage in, moderate or egregious epistemic trespassing on the witness stand is information about, in Goldman's terms, the purported expert's (1) credentials (as a form of "appraisals" by "meta-experts") and (2) track record.⁶⁵ Examples from these same categories show up in Anderson's suggestions of how to identify experts as well. Let us look at what each has to say in turn.

Regarding credentials, Goldman writes that credentials in the form of "academic degrees, professional accreditations, work experience and so forth (all from specific institutions with distinct reputations) reflect certification by other experts [of an expert's] demonstrated training or competence." Thus, credentials such as academic degrees and professional certifications provide laypeople with something akin to testimonial evidence from other experts that the person with the credential is also an expert. This is attested to by phrases found on many university diplomas stating that degrees are conferred upon the recommendation of the faculty.

Goldman also suggests that we can use a purported expert's track record to gain information about their expertise. Goldman's primary concern is with adjudicating competing claims by experts, but the general idea of a track record as a metric of assessment can be transferred to determining whether one is an expert. The following is a non-exhaustive list of aspects of someone's track record that can be used to test for expertise:

- Has the purported expert published peer-reviewed research in a relevant area?
- Who is on the editorial board for the journals where the purported expert has publications? Are the editorial board members credentialed experts in relevant domains?
- Has the purported expert's work been relied on by other experts in the field (including by being cited by other experts)?
- If the purported expert is conducting scientific research, has their research been replicated or otherwise verified?
- · Has the purported expert served on review panels or as part of professional committees?
- Is the purported expert a member in good standing of a relevant professional organization?
- · Who, if anyone, has funded the purported expert's research?
- Has the purported expert received awards or other forms of recognition for their work?

⁶⁵ Goldman, "Experts," 93.

⁶⁶ Goldman, "Experts," 97.

In the context of a trial, a judge is able to require that evidence be provided about the purported expert's credentials and track record, and opposing counsel is able to question the purported expert about many of these things under oath. As a result, a trial is a context in which this information can be obtained and used as the basis for determining a purported expert's expertise.

Elizabeth Anderson brings together considerations of credentials and track record to construct a "hierarchy of expertise" as follows:

- (a) Laypersons.
- (b) People with a B.S. degree, a B.A. science major, or a professional degree in an applied science specialty far removed from the field of inquiry in question.
- (c) Ph.D. scientists outside the field of inquiry.
- (d) Ph.D. scientists outside the field, but with collateral expertise (for example, a statistician who is judging the use of statistics in the field).
- (e) Ph.D. scientists trained in the field.
- (f) Scientists who are research-active in the field (regularly publish in peer-reviewed scientific journals in the field).
- (g) Scientists whose current research is widely recognized by other experts in the field, and whose findings they use as the basis for their own research. This can be determined by considering such factors as citation counts, the impact factors of the journals in which they publish, and record in winning major grants.
- (h) Scientists who are *leaders* in the field—who have taken leading roles in advancing theories that have won scientific consensus or opened up major new lines of research, or in developing instruments and methods that have become standard practice. In addition to the factors cited in (g), leadership is indicated by election to leadership positions in the professional societies of the field, election to honorary scientific societies, such as the National Academy of Science, and receipt of major prizes in the field, such as the Nobel Prize.⁶⁷

Anderson writes that "in general, the weight people should accord to others' testimony about a field increases as they go down the list, increasing especially steeply for categories (f), (g), and (h)."

If we treat an MD as a credential similar to a PhD, Anderson's hierarchy provides a useful way of explaining the different levels of epistemic trespassing in

⁶⁷ Anderson, "Democracy, Public Policy, and Lay Assessments of Scientific Testimony," 146-47.

⁶⁸ Anderson, "Democracy, Public Policy, and Lay Assessments of Scientific Testimony," 147.

Weeks's trial for attempted murder. As a PhD in psychology, Paul Cameron is at level (c), although his expulsion from the American Psychological Association and that it is unclear whether his work at the time of the trial constituted scientific research count as marks against even this limited level of expertise. If we treat different medical specialties as equivalent to different fields, Lorraine Day is also at level (c). Mark Dowell, as a practicing MD in infectious diseases, is at level (e), but the record does not provide evidence that he was doing the kind of medical research that would bring him up to level (f). It is only the defense's witness, Richard Pollard, who reaches the levels of expertise that Anderson picks out as most significant. Like Dowell, Pollard is certified as a specialist in infectious diseases, which qualifies him for level (e). But Pollard's "research program active in both clinical and scientific research focused upon infections with HIV" satisfies level (f). In addition, that Pollard sat on a national panel which looks at all the drug studies conducted by the National Institutes of Health for the treatment of AIDs infections indicates that he is a leader in his field who may satisfy level (g) or (h).

Weeks's case is a good example of how the information needed to assess the scope and depth of a purported expert's expertise is provided as a matter of course during a trial. In a properly run trial, information about the credentials and track record of an expert witness should be available to judges, attorneys, and jurors. This information can be and should be used to assess whether expert witnesses are engaging in epistemic trespassing.

Weeks's case is also a good example of how more egregious epistemic trespassing is easier to identify than more subtle forms. If Dowell trespassed at all, it was fairly subtle epistemic trespassing. Such trespassing may not be easily identifiable by judges, attorneys, or jurors—most of whom will be laypeople in reference to the relevant area of expertise most of the time. The more closely related different areas of expertise are, the harder it will be for nonexperts to distinguish them. But one need not have any kind of special skills to recognize the difference between orthopedic surgery and infectious diseases or between psychology and medicine. Thus, while it may remain challenging for laypeople to identify subtle epistemic trespassing, in the context of a trial they are often well-positioned to get the information they need to identify moderate and severe forms of epistemic trespassing.

The good of using credentials and track records to identify epistemic trespassers comes with a potential downside. If these methods are taken too far and the standards set too high, qualified experts may be denied the opportunity to testify in court as an expert witness. If courts set the bar too high, we may encounter an access-to-justice problem whereby it becomes too difficult for many litigants and defendants to obtain the help of qualified experts. Thus, vigilance is required in both directions. The Supreme Court offers a useful guiding prin-

ciple that can help navigate between these two problematic extremes. This principle is the one we saw earlier—namely, that an expert should employ "in the courtroom the same level of intellectual rigor that characterizes the practice of an expert in the relevant field." In order to testify as an expert witness, one need not be at the top of their field. They need not be exceptional among the experts. Rather, they need to be able to apply the *same* level of intellectual rigor as *an* expert in the relevant field. This standard does not eliminate the need for good judgment in application, but no legal standard does. It is enough to guide a competent decision maker in avoiding blatant epistemic trespassing and blatant elitism in determining who can testify as an expert witness at trial.

4.3. The Roles of Judges and Trial Lawyers in Preventing Epistemic Trespassing

Supreme Court precedent holds that judges serve a "gatekeeping role" in determining who is allowed to testify as an expert witness at trial.⁷⁰ This means, among other things, that judges have a responsibility to determine whether those who are requesting to testify as expert witnesses are in fact experts about the matters for which they seek to testify. Importantly, the judge's gatekeeping role is not about assessing an expert's conclusions.⁷¹ Thus, the distinction made in the previous subsection—between determining whether someone is an expert and determining whether to trust or believe the expert's testimony—is relevant. When acting as gatekeepers, judges should do only the former, not the latter.

Appellate judges are also charged with a gatekeeping role of sorts. In *General Electric Co. v. Joiner*, the Supreme Court held that trial judges' decisions about whom to allow to testify as an expert witness are subject to an abuse of discretion standard.⁷² On this standard, trial judges' decisions about whom to admit as expert witnesses are given a great deal of deference. But this deference is not complete. In cases where the appellate court finds that the trial judge's ruling about whether to admit an expert witness was clearly erroneous, the appellate court can reverse the trial judge's decision.⁷³

Judges, like other laypeople, have limited knowledge from which to determine whether someone is engaging in epistemic trespassing. However, as argued in the previous subsections, many laypeople are capable of identifying moderate and egregious cases of epistemic trespassing just by looking at credentials and

- 69 Kumho Tire Co. v. Carmichael, 526 U.S. 137, 152 (1999).
- 70 Daubert, 509 U.S. at 597.
- 71 Daubert, 509 U.S. at 594-95.
- 72 See General Electric Co. v. Joiner, 522 U.S. 136 (1997).
- 73 For discussions of the abuse of discretion standard see Graham, "Abuse of Discretion, Reversible Error, Harmless Error, Plain Error, Structural Error"; and Ryan "Backfire."

track record. If we return to the case of Curtis Weeks, a judge who was faithfully carrying out the role of gatekeeper should easily have been able to determine that allowing Cameron and Day to testify as "experts on HIV" would be to permit egregious epistemic trespassing. As such, Cameron and Day should have been denied access to the witness stand.

As Weeks's trial shows, trial judges sometimes fail in their role as gatekeepers for expert testimony. But there are steps that litigators can take to try to combat epistemic trespassing as well. First, litigators should avoid seeking to have epistemic trespassers admitted as experts in court. Had the prosecution in Weeks's case been more scrupulous about whom it put forward as an expert, the issue of epistemic trespassing would never have arisen in the first place.

Second, if an opposing party procures a spot on the witness stand for an epistemic trespasser, litigators should seek to make clear to the jury that the purported expert is out of their depth and, as a result, both less reliable and less trustworthy. This should be done by vigorous cross-examination of the expert about the scope of their expertise. This is also something that perhaps at times can be usefully woven into the narrative framing of the case.

Finally, attorneys should treat epistemic trespassing as grounds for appeal. If, as in Weeks's case, epistemic trespassing was required to provide evidence for an otherwise undefendable aspect of the case, attorneys ought to appeal for that reason.

In this section, we covered what epistemic trespassing is, how one can identify it, and what judges and attorneys should do in response. In the final section, I consider the perspective of jurors. Specifically, I discuss three ways in which identifiable epistemic trespassing ought to shape a juror's view of the evidence presented.

5. JURIES AND THE EVIDENTIAL SIGNIFICANCE OF EPISTEMIC TRESPASSING

In this section, I argue that recognizable instances of epistemic trespassing by an expert witness provide jurors with higher-order evidence that epistemically weakens the case of the trespassing party. More specifically, I argue that recognizable instances of epistemic trespassing provide jurors with evidence that:

- 1. The trespasser is unreliable.
- 2. The trespasser is untrustworthy.
- 3. At least some of the assertions of the epistemic trespasser are assertions that genuine experts are unwilling to make.

The notion of evidence I am using here is one where evidence counts in favor of

that for which it is evidence, all else equal. Such evidence can be undermined, rebutted, or outweighed. Thus, one can recognize that there is evidence for a position while still rationally rejecting that position. With that notion of evidence in mind, let us examine each of the three claims.

5.1. Epistemic Trespassing as Evidence of Unreliability

This first principle follows from considerations already covered in this paper and in Ballantyne's initial argument against epistemic trespassing. When we trespass, we become less reliable. This is because when we trespass, we move into an area where we do not have the skills or experience needed to assess evidence and generally will not reach conclusions as accurately as true experts would. If as a juror you encounter an instance of recognizable epistemic trespassing, you gain higher-order evidence that the trespasser is less likely to be a reliable source of information.

5.2. Epistemic Trespassing as Evidence of Untrustworthiness

There is a relationship between reliability and trust. Those who are unreliable are, all else equal, less trustworthy than those who are more reliable. Thus, jurors already gain some reason to distrust epistemic trespassers because they are less reliable than true experts. But the unreliability of epistemic trespassers is only part of the evidence jurors gain that trespassing expert witnesses are untrustworthy.

In addition, jurors can reason from the starting point that those most deserving of our trust will be careful to avoid epistemic trespassing. Epistemic trespassers show that they either lack self-awareness about the limits of their own expertise or lack a commitment to honest representation of their own expertise. Both of those criteria give us a reason to downgrade the trustworthiness of the trespasser. If they trespass because they lack self-awareness of their limits, we gain evidence that the trespasser may be confident about other conclusions for which they should not be confident. If they trespass because they lack a commitment to honest representation of their expertise, this provides us with evidence about their moral character. If they are willing to lie or exaggerate about their expertise, we can rationally conclude that they are more likely to lie or exaggerate in giving testimony. Thus, epistemic trespassing is a sign not only of the unreliability of the trespasser, but of their untrustworthiness as well.

5.3. Epistemic Trespassing as Evidence of a Weak Position

The first two kinds of evidence I have argued jurors gain by observing recognizable epistemic trespassing are about the credibility of the expert witness. The third kind of evidence comes from the trespasser's role as part of the larger legal

strategy of one of the parties. This third kind of evidence rests on two assumptions. First, attorneys generally seek to present stronger cases rather than weaker ones. Second, the expert testimony of a true expert in domain D better contributes to the strength of a case than the "expert testimony" of an epistemic trespasser in domain D, all else equal.

If we think about what a strategic attorney would do in selecting an expert witness, we can see how this can provide the jury with evidence about the strength of a party's case. Attorneys will want to select witnesses that the jury will find convincing. Given the potential for jurors to spot clear cases of epistemic trespassing, attorneys are reasonable in concluding that a true expert will, all else equal, be a more convincing witness than a trespasser. Thus, attorneys will prefer true experts to trespassers, all else equal.

From the perspective of a juror, if an attorney presents you with an epistemic trespasser rather than a true expert, this provides you with some reason to think that the attorney failed in obtaining their preferred outcome of having a true expert assert the things that the trespasser is asserting instead. But if the attorney failed to find a true expert who would be willing to assert the claims that the trespasser is asserting, this makes it more likely that true experts are unwilling to assert at least some of what the trespasser is asserting. And if true experts are unwilling to assert at least some of what the trespasser is asserting, this is evidence that the trespasser's claims are not shared (or at least not shared widely) by true experts. This gives jurors a reason to think that the case of the party with the epistemic trespasser is weak concerning at least some matters attested to by the trespasser.

These ways in which expert trespassing testimony provides jurors with rational reason to view the trespassing party's case as weak would, if widely recognized by jurors, provide attorneys with reasons not to bring in expert witnesses who engage in epistemic trespassing. The fact that attorneys sometimes do put epistemic trespassers on the stand suggests that jurors' wariness of epistemic trespassing is not so strong as to consistently disincentivize the behavior at present. But that incentive can be strengthened if jurors become more confident in identifying and penalizing epistemic trespassing by expert witnesses. That said, it is easy to understand why jurors might be hesitant to identify expert witnesses as epistemic trespassers given that such trespassers have been treated by the court as genuine experts. As noted earlier, courts create misleading higher-order evidence when they permit "expert witnesses" to engage in epistemic trespassing. Thus, in comparison to judges and litigators, jurors are at an epistemic disadvantage when it comes to identifying and accounting for epistemic trespassing. As a result, judges and litigators are generally better positioned to identify and prevent epistemic trespassing.

6. CONCLUSION

In this paper I have examined the issue of epistemic trespassing by expert witnesses in a court of law. I have argued for each of the following. Expert witnesses should avoid making any trespassing claims. Merely qualifying such claims to indicate one's lack of expertise is not enough. Judges, litigators, and jurors can identify many instances of moderate and egregious epistemic trespassing by examining a purported expert's credentials and track record. Jurors have reason to treat recognizable instances of epistemic trespassing as counting against the strength of the trespassing party's position, but this can be offset by the misleading evidence that the epistemic trespasser has been permitted by the court to trespass as an expert witness. Judges and lawyers are better positioned than jurors to address and prevent epistemic trespassing by expert witnesses. Judges should not permit epistemic trespassers to testify as expert witnesses. Litigators should expose epistemic trespassers during cross-examination. Such steps would increase our ability to use trials as a way of achieving justice.⁷⁴

Wayne State University mark.satta@wayne.edu

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