

---

---

A HEDGEHOG ON THE WITNESS STAND—  
WHAT’S THE BIG IDEA?:  
THE CHALLENGES OF USING *DAUBERT* TO  
ASSESS SOCIAL SCIENCE AND  
NONSCIENTIFIC TESTIMONY

MAXINE D. GOODMAN\*

*Objectivity cannot be equated with mental blankness; rather,  
objectivity resides in recognizing your preferences and then subjecting  
them to especially harsh scrutiny—and also in a willingness to revise  
or abandon your theories when the tests fail (as they usually do).*

—Stephen Jay Gould<sup>1</sup>

TABLE OF CONTENTS

Introduction.....	636
I. The Basic Tenets of Trial Court Gatekeeping Under <i>Daubert</i> .....	640
A. The <i>Daubert</i> Standard .....	643
1. Factors .....	644
2. Degrees of Rigor .....	649
B. Procedure .....	652
1. To Hear or Not to Hear.....	652
2. Proponent’s Burden .....	653
3. Appellate Review.....	654

---

\* Associate Professor, *South Texas College of Law*. I gratefully acknowledge the help of my South Texas colleagues and the participants of the SEALS New Scholar program for their guidance with this Article. I am especially grateful to my colleague Tobin Sparling, whose great work often inspires me to get working, and Professor Roberta Flowers, my SEALS mentor, for her wonderful, insightful suggestions. Thanks also to Ian McCarthy and Anna Gamez for their valuable research help and to the terrific editors at *American University Law Review* for their very competent, prompt editing work on this Article.

1. Stephen Jay Gould, *Capturing the Center*, NAT. HIST., Dec. 1998, at 18. Gould, who died in 2002, was a preeminent paleontologist, evolutionary biologist, and science historian. Carol Kaesuk Yoon, *Stephen Jay Gould, 60, Is Dead; Enlivened Evolutionary Theory*, N.Y. TIMES, May 21, 2002, at A1.

II. The Fox, the Hedgehog, and Bias: What Happens When the Hedgehog (or the Fox) Testifies as an Expert Witness ...	655
A. The Fox and the Hedgehog.....	656
B. Evan Kohlmann—"Celebrity Expert" .....	659
C. Hedgehog Bias.....	669
D. Matthew Levitt—A Likely Fox.....	672
III. Proposal: Rejuvenate <i>Daubert</i> to Include Consideration of an Expert's Cognitive Approach.....	674
A. Courts Should Determine and Apply the Most Fitting Set of Factors, Given the Type of Expertise .....	677
1. Methodological .....	679
a. Response of peer review community .....	679
b. Dispassionate allegiance to professional standards .....	679
2. Foundational reliability .....	680
a. Method of selecting/verifying supporting evidence and documents.....	680
b. Treatment of contrary evidence or methodology .....	680
c. Whether the field of expertise is "known to reach reliable results" for the type of opinion the expert offers in court .....	680
3. Connective.....	681
a. Ipse dixit.....	681
4. Bias indicators .....	681
a. Context in which expert developed methodology/theory .....	681
b. Overcoming bias .....	681
c. Subjective interpretation.....	681
B. At the Same Time, Courts Should Enforce Procedural Reforms to Ensure Accountability and Transparency .....	682
Conclusion .....	682

## INTRODUCTION

In 1953, philosopher Isaiah Berlin used the fox/hedgehog distinction to describe and explain the life and work of Leo Tolstoy.<sup>2</sup> The dichotomy, attributed to the Greek warrior/poet Archilochus, goes something like this: "The fox knows many things, but the hedgehog knows one big thing."<sup>3</sup> Berlin described Tolstoy as a fox—

2. ISIAH BERLIN, *The Hedgehog and the Fox*, in *THE PROPER STUDY OF MANKIND: AN ANTHOLOGY OF ESSAYS* 436, 436 (Henry Hardy & Roger Hausheer eds., Farrar, Straus and Giroux 1998).

3. *Id.* Others translate the quote differently: "[F]oxes 'pursue many ends, often unrelated and even contradictory.'" Jonathan L. Entin, *Peter Junger: Scholar and Stylist*, 58 *CASE W. RES. L. REV.* 319, 319 (2008). Entin describes a discourse in which Professor Junger called himself a fox, in contrast to "the Great Hedgehog," Richard Posner. *Id.* at 323.

fascinated by a variety of people and things—who sought to be a hedgehog—consumed and motivated by a central, single vision.<sup>4</sup>

More than fifty years later, in 2005, Philip Tetlock applied the same distinction<sup>5</sup> to the cognitive approaches of political forecasters: those with unwavering commitment to a single world-view (hedgehogs) as opposed to those with a more open-minded cognitive approach who tend to see alternative explanations and embrace ambiguity (foxes).<sup>6</sup> Tetlock concluded that the fox is typically the better political forecaster, although the hedgehog is commendable because she persists in a particular view.<sup>7</sup>

In this Article, I borrow the distinction and apply it to expert witnesses at trial. Whatever type of expert, whether scientific, nonscientific, academic, or experiential, according to Berlin's dichotomy, the hedgehog tends toward a single, central view of the world; she approaches this view with unwavering commitment.<sup>8</sup> The fox sees the gray, tending toward self-doubt about her view and always considering alternative explanations.<sup>9</sup> As Stephen Jay Gould emphasized, neither is "better" because both intellectual styles are valuable and necessary in the pursuit and development of ideas.<sup>10</sup>

I apply the distinction to a narrow category of cases and to one particular expert witness, Evan Kohlmann, who has testified repeatedly for the government in criminal cases against alleged terrorists.<sup>11</sup> I posit that Kohlmann is a hedgehog-type expert,

---

4. BERLIN, *supra* note 2, at 436, 438.

5. Stephen Jay Gould also uses the distinction in his book about interactions between the sciences and humanities. STEPHEN JAY GOULD, *THE HEDGEHOG, THE FOX, AND THE MAGISTER'S POX: MENDING THE GAP BETWEEN SCIENCE AND THE HUMANITIES* 5–6 (2003).

6. See PHILIP E. TETLOCK, *EXPERT POLITICAL JUDGMENT: HOW GOOD IS IT? HOW CAN WE KNOW?* 2 (2005) (discussing the benefits of experts with fox-like traits as opposed to those with more hedgehog-like traits).

7. *Id.* at 19–24. Tetlock does not identify individual forecasters; rather, he uses events such as the fall of the Soviet Union, *id.* at 107–08, the 2000 presidential election, *id.* at 133–34, and the collapse of communist regimes in North Korea and Cuba, *id.* at 96–97, to illustrate how well the forecasters as a group on each side of the continuum fared in terms of accuracy.

8. BERLIN, *supra* note 2, at 436–37.

9. *Id.*

10. GOULD, *supra* note 5, at 5–6.

11. See, e.g., *United States v. Aref*, 285 F. App'x 784, 792 (2d Cir. 2008), *cert denied*, 129 S. Ct. 173 (2009); *United States v. Benkahla*, 530 F.3d 300, 305 (4th Cir. 2008), *cert denied*, 129 S. Ct. 950 (2009); *United States v. Paracha*, 313 F. App'x 347, 351 (2d Cir. 2008); *United States v. Sadequee*, No. 1:06-Cr-147-WSD, 2009 WL 3785566, at \*3 (N.D. Ga. Nov. 10, 2009); *United States v. El-Hindi*, No. 3:06 Cr 719, 2009 WL 1373268, at \*2 (N.D. Ohio May 15, 2009); *United States v. Kassir*, No. S2 04 Cr 356(JFK), 2009 WL 910767, at \*1 (S.D.N.Y. Apr. 2, 2009); *United States v. Abu-Jihaad*, 600 F. Supp. 2d 362, 366 (D. Conn. 2009); *Gates v. Syrian Arab Republic*, 580 F. Supp. 2d 53, 59 n.5 (D.D.C. 2008), *motion to vacate denied*, 646 F. Supp. 2d 79

motivated by unflinching devotion to one big idea. Presumably, this cognitive approach impacts not only Kohlmann's conclusions but also his method of arriving at his conclusions.<sup>12</sup> Yet, despite *potential* shortcomings in Kohlmann's methodology stemming from this kind of cognitive process,<sup>13</sup> courts have readily, eagerly, and with very little scrutiny admitted Kohlmann to testify as an expert witness in the cases described herein.

This Article considers how the hedgehog-type expert<sup>14</sup> fares in the framework established by the Supreme Court in *Daubert v. Merrell Dow Pharmaceuticals, Inc. (Daubert I)*.<sup>15</sup> Many commentators have criticized *Daubert* because, among other problems, the five typical *Daubert* factors are ill-suited for social science.<sup>16</sup> This Article takes a different tack. Using the hedgehog/fox distinction, this Article shows that, particularly in the social science arena, the expert most likely to appeal to a court using the *Daubert* factors may be the least likely to testify based on a reliable social science methodology. Said differently, *how* an expert thinks is as important to determining the trustworthiness of that expert's methodology as *what* that expert thinks.

---

(D.D.C. 2009); *United States v. Amawi*, 552 F. Supp. 2d 669, 671 (N.D. Ohio 2008); *United States v. Sabir*, No. S4 05 Cr 673 (LAP), 2007 WL 1373184, at \*1 (S.D.N.Y. May 10, 2007); *United States v. Padilla*, No. 04-60001-CR, 2007 WL 4856865, at \*1 (S.D. Fla. Mar. 21, 2007).

12. See GOULD, *supra* note 5, at 5 (discussing hedgehogs' method of thought); TETLOCK, *supra* note 6, at 2 ("What experts think matters far less than *how* they think.").

13. I never establish that Kohlmann's methodology is unreliable or that his conclusions are wrong, nor do I try to do so, as this is not my objective. Rather, I contend that we have no way of knowing whether this type of testimony is reliable because of shortcomings with *Daubert* as a gatekeeping tool. As illustrated in the Article, I do *suspect* Kohlmann's methodology is skewed by his hedgehog-type thinking.

14. I focus in this Article on the hedgehog-type expert. The fox-type expert presents issues as well, as foxes' self-doubting, uncertain, prone-to-controversy thought process would, presumably (and as described in more detail below), make this expert unattractive to courts. In the arena of scientific expertise, commentators have already described how courts "idealize" scientific testimony and thus tend to exclude experts who express doubt and uncertainty. See DAVID S. CAUDILL & LEWIS H. LARUE, NO MAGIC WAND: THE IDEALIZATION OF SCIENCE IN LAW 2-4, 15 (2006) (explaining how the idealization of science can prevent judges and other legal commentators from critically assessing the limits of science). Caudill and LaRue do not rely on the fox/hedgehog dichotomy (or on characteristics of the experts) but rather on courts' reaction to scientific experts who express uncertainty. *Id.* at 15.

15. 509 U.S. 579 (1993).

16. See, e.g., Edward J. Imwinkelried, *The Next Step After Daubert: Developing a Similarly Epistemological Approach to Ensuring the Reliability of Nonscientific Expert Testimony*, 15 CARDOZO L. REV. 2271, 2294 (1994) (discussing the difficulty of applying *Daubert* to nonscientific testimony).

In Part I, I examine the *Daubert*/Rule 702<sup>17</sup> evidentiary reliability standard and courts' current practice and procedure, illustrating what methods courts presently use to test for reliability. This Part highlights the general, widespread inconsistency in how courts apply *Daubert* with respect to two key aspects of *Daubert* gatekeeping: (1) what factors make up the test, and (2) the degree of rigor with which courts apply the factors. This Part provides background for illustrating the peril of courts vetting a hedgehog-type expert's methodology using *Daubert*. As described herein, *Daubert* actually serves to flatter the hedgehog-type expert, making the expert especially attractive to courts.

Part II describes the fox/hedgehog distinction as applied to the cognitive styles of experts and judges. In this Part, I narrow the focus to a particular set of cases—criminal cases against alleged terrorists in which the government routinely proffers, and courts routinely admit, a hedgehog-type expert. I attempt to use the distinction as a lens through which one may consider *Daubert* gatekeeping with a certain type of expert. Generally, we think of *Daubert*'s effectiveness as it relates to a particular category of cases or types of expertise (scientific versus nonscientific or criminal versus civil). In this analysis, the expert has a particular cognitive approach—a specific way of processing information. The expert's cognitive approach significantly impacts how a court should assess the expert's methodology for reliability. Ideally, it also calls for self-reflection on the part of judges, who themselves tend to process information in certain ways, and it calls for a different set of presumptions for courts to apply when evaluating expert witnesses.<sup>18</sup>

The hedgehog/fox dichotomy is best thought of as a continuum in terms of cognitive approaches. In other words, it is unfair to describe an expert as a complete hedgehog or a complete fox; rather some have more hedgehog- or fox-like characteristics.<sup>19</sup> The fox-type expert, if studied using the same paradigm (holding this type of

---

17. See FED. R. EVID. 702 (outlining various requirements that must be met before testimony by experts can be admitted).

18. How judges process information in their decision-making is not the essence of this Article. Yet, how judges think also impacts the phenomenon (and remedies) described in this Article. See generally Dan Simon, *A Psychological Model of Judicial Decision Making*, 30 RUTGERS L.J. 1 (1998); Tobin Sparling, *Through Different Lenses: Using Psychology to Assess Popular Criticism of the Judiciary from the Public's Perspective*, 19 KAN. J.L. & PUB. POL'Y (forthcoming 2010).

19. See TETLOCK, *supra* note 6, at 87 ("Berlin recognized that few fit the ideal-type template of fox or hedgehog. Most of us are hybrids, awkward hedge-fox and fox-hog amalgams.").

cognitive process up against the *Daubert* framework) would probably reveal the same set of issues. This highlights why effective judicial gatekeeping should include exploring the expert's methodology, including, specifically, *how* the expert thought about the issues.

Ultimately, in Part III, I propose a revamped and rejuvenated *Daubert* standard for testing social science and nonscientific testimony. The changes are meant to remedy the problem of courts' reluctance and/or inability (for varying reasons) to carefully review expert methodology.<sup>20</sup> As part of this proposal, I recommend that courts, in exercising their gatekeeping function, add certain presumptions and eliminate some existing presumptions to better assess not just what an expert is thinking but how the expert arrived at a theory.

Obviously, some may criticize the use of the hedgehog/fox distinction as clumsy and simplistic. Actually, Isaiah Berlin agreed that "if pressed," the dichotomy could become "artificial, scholastic and ultimately absurd."<sup>21</sup> Yet, he counseled that the dichotomy could also prove beneficial:

But if it is not an aid to serious criticism, neither should it be rejected as being merely superficial or frivolous; like all distinctions which embody any degree of truth, it offers a point of view from which to look and compare, a starting-point for genuine investigation.<sup>22</sup>

Here, the distinction is used as a novel way of examining *Daubert* gatekeeping; as Berlin suggests, it provides a valuable investigative tool for this task.

#### I. THE BASIC TENETS OF TRIAL COURT GATEKEEPING UNDER *DAUBERT*

The point of this Article is not that *Daubert* is flawed but rather that shortcomings in our federal gatekeeping scheme are exacerbated when parties proffer experts who possess certain traits, specifically particular cognitive approaches. Essentially, the test becomes largely ineffective with the hedgehog-type expert because *Daubert* actually masks potential flaws in this type of expert's methods. As this Article explains, the "one-big-idea" type expert is especially appealing to

---

20. The proposed solutions would certainly apply with equal force to a scientific expert (who could also be a hedgehog). The only difference is that with certain hard-science expertise, the methodology would involve testing and replicating a test, so the trustworthiness of the expert's method would have some internal checks.

21. BERLIN, *supra* note 2, at 437.

22. *Id.*

courts. However, the *Daubert* test is not effective at assessing the reliability of this expert's methodology.

In 1994, soon after the Supreme Court decided *Daubert*, Professor Edward Imwinkelried urged courts and commentators to proceed from the objective validation standards for scientific testimony in *Daubert* to "the development of objective validation standards for nonscientific opinion,"<sup>23</sup> which, according to Imwinkelried, would be difficult but was "both vital and feasible."<sup>24</sup>

Yet, sixteen years after *Daubert*, neither the Supreme Court nor the Federal Rules Advisory Committee has crafted a reliability standard for expert opinions involving social or soft sciences, or wholly nonscientific testimony. Such a standard is lacking even after the Court expressly included all expert testimony—not just scientific testimony—within the scope of courts' gatekeeping role in *Kumho Tire Co. v. Carmichael*,<sup>25</sup> and after the Federal Rules Advisory Committee amended Rule 702 to incorporate the *Daubert* and *Kumho* rulings.<sup>26</sup> Courts still cling to the scientifically grounded *Daubert* factors, sometimes merely giving *Daubert* lip service, even when the expert is a historian, political scientist, sociologist, or anthropologist, for whose testimony the factors are ill-suited.<sup>27</sup> Accordingly, as Imwinkelried foretold, *Daubert* gatekeeping for social science and nonscientific experts reflects courts' "laissez-faire attitude toward the reliability of the propositions underlying nonscientific expert testimony."<sup>28</sup> The absence of suitable factors for ensuring reliability

---

23. Imwinkelried, *supra* note 16, at 2294.

24. *Id.*

25. See 526 U.S. 137, 147 (1999) (making no distinction for purposes of the courts' gatekeeping obligation "between 'scientific' knowledge and 'technical' or 'other specialized' knowledge").

26. The Court decided a third case, *General Electric Co. v. Joiner*, 522 U.S. 136 (1997), which became part of the *Daubert* trilogy.

27. By nonscientific experts, I mean experts whose field does not involve the hard or soft sciences. These experts are formally educated or trained and are working or teaching in fields such as history, sociology, anthropology, music, law, and linguistics. See, e.g., *Wayne v. Shadowen*, 15 F. App'x 271, 285 n.24 (6th Cir. 2001) (considering an expert affidavit by a music teacher); *Cook v. Rockwell Int'l Corp.*, 580 F. Supp. 2d 1071, 1165–66 (D. Colo. 2006) (discussing a historian's expert report). Obviously, the expertise of certain types of nonscientific experts, like accountants and bankers, is more "technical" and is thus subject to more objective verification or validation than other expertise. See, e.g., *United States v. Hermanek*, 289 F.3d 1076, 1090 (9th Cir. 2002) (applying the *Daubert* factors to an investigator testifying on the coded meanings of words in the narcotics trade); *Okerlund v. United States*, 53 Fed. Cl. 341, 346 (2002) (applying the *Daubert* factors to an expert on valuation, whose qualifications were in business economics and finance).

28. Imwinkelried, *supra* note 16, at 2280–81.

of nonscientific expert opinions results in no real judicial gatekeeping at all.<sup>29</sup>

Now, sixteen years after Imwinkelried suggested that the Court design a standard for social science and nonscientific testimony, courts' gatekeeping with respect to evidentiary reliability of nonscientific testimony is haphazard in every respect. Certain federal courts disregard the reliability requirement altogether (and focus almost exclusively on qualifications) and other federal courts assess reliability, but do so without a uniform standard or consistent degree of rigor. Courts speak in *Daubert* language, yet their reliability assessments do not track *Daubert* factors (which is understandable, given that the factors are not well-suited to the task). The result is that courts employ a cursory assessment rather than an "exacting analysis."<sup>30</sup> Accordingly (and ironically), the courts' review is often most sketchy with nonscientific expertise, presumably because the methodology is not scientific and is thus not subject to objective validation, even though common sense would dictate stricter scrutiny because of the absence of a known objectively verifiable methodology.<sup>31</sup>

Given the absence of a suitable gatekeeping test, the hedgehog-type expert, whose one big idea informs all her related ideas, and who possesses strong qualifications stemming from her dogged pursuit of this one big idea, tends to easily pass *Daubert* muster. As shown below, evidence of the expert's commitment to an idea becomes confused with evidence of the expert's careful and methodical pursuit of the idea, which typically gets overlooked. As a result, courts routinely admit this type of expert.

The problem of testing the reliability of expert testimony under *Daubert* becomes even more pronounced when an expert relies heavily on sources that are difficult to authenticate, such as Internet sources. Under Rule 703 of the Federal Rules of Evidence, an expert

---

29. Commentators argue that the courts' misuse of *Daubert* supports the notion that juries, rather than judges, should make reliability determinations. In other words, if courts are just going to pay lip service to the test, why not allow the jury to weigh the testimony instead of going through the motions of gatekeeping? See Note, *Reliable Evaluation of Expert Testimony*, 116 HARV. L. REV. 2142, 2142 (2003) ("[T]o the extent that judges do not follow a reliable methodology in executing their gatekeeping function, there is little guarantee that they will reach results superior to those of a jury and little reason to accept the trustworthiness of their rulings.").

30. See *McCorvey v. Baxter Healthcare Corp.*, 298 F.3d 1253, 1257 (11th Cir. 2002) ("Rulings on admissibility under *Daubert* inherently require the trial court to conduct an exacting analysis of the proffered expert's methodology.").

31. Imwinkelried, *supra* note 16, at 2279 ("The very nature of scientific evidence builds in some assurance of the accuracy of the testimony.").

can rely on inadmissible sources—such as websites and blogs—if the sources are “of a type reasonably relied upon by experts in the particular field in forming opinions.”<sup>32</sup> For example, the “particular field” relied on by the expert described in this Article—the very current field of international terrorism since 9/11—requires substantial reliance on Internet sources.<sup>33</sup> Consequently, screening the testimony of these experts for reliability is critical but is made more difficult as a result of the absence of suitable *Daubert* factors.

This Part describes the *Daubert* standard, illustrating various problems with courts’ current application of the gatekeeping test. Section I.A addresses the standard itself, outlining the typical factors and describing how courts often stray from these factors in their attempts to add more fitting criteria or eliminate unhelpful criteria. This Section also discusses the varying degrees of scrutiny that courts use to assess an expert’s methodology. Section II.B briefly addresses procedural issues regarding gatekeeping under *Daubert*. This background sets the stage for understanding why the hedgehog-type expert is attractive to courts and, correspondingly, why she typically gets admitted to testify as an expert even though courts fail to review her methodology.

#### A. *The Daubert Standard*

In describing the *Daubert* standard, I address two aspects: (1) the set of factors that courts typically rely on, and (2) the degree of rigor that courts commonly use when applying these factors. As shown below, courts sometimes stray from the traditional *Daubert* factors, often without explaining the departure, and courts use varying degrees of rigor when applying those factors.<sup>34</sup> Accordingly, courts

---

32. FED. R. EVID. 703.

33. Evan Kohlmann, the expert described in this Article, relies heavily on Internet sources in both his book and his expert witness reports. See EVAN KOHLMANN, AL-QAIDA’S JIHAD IN EUROPE: THE AFGHAN-BOSNIAN NETWORK 144–45, 227 (2004) (drawing support from numerous Internet sources). In one of the cases described below, *United States v. Amawi*, 541 F. Supp. 2d 945 (N.D. Ohio 2008), Judge Carr referenced the expertise required to use the Internet to track terrorist organizations—treating this, in itself, as a form of expertise. *Id.* at 949. Other courts have not expressed the same concern for the expertise necessary to gather this type of evidence.

34. According to one commentator, the “*Daubert* dicta”—Justice Blackmun’s testing considerations—are “more common than the use of other indicia of arguments about reliability,” yet “they appear in less than half of all such admissibility decisions.” Robert Robinson, *Daubert v. Merrell Dow Pharmaceuticals and the Local Construction of Reliability*, 19 ALB. L.J. SCI. & TECH. 39, 64–65 (2009) (citing Christina L. Studebaker & Jane Goodman-Delahunty, *Expert Testimony in the Courts*:

are all over the board in using *Daubert* to fulfill their gatekeeping obligation.<sup>35</sup>

### 1. Factors

Federal courts currently use the test from *Daubert*,<sup>36</sup> as applied to nonscientific testimony in *Kumho*, to screen expert testimony for admissibility.<sup>37</sup> *Daubert* was meant to clarify Rule 702 of the Federal Rules of Evidence,<sup>38</sup> which governs the admissibility of expert testimony. Rule 702 provides as follows:

If scientific, technical, or other specialized knowledge will 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 thereto in the form of an opinion or otherwise, if (1) the testimony is based upon sufficient facts or data, (2) the testimony is the product of reliable principles and methods, and (3) the witness has applied the principles and methods reliably to the facts of the case.<sup>39</sup>

---

*The Influence of the Daubert, Joiner, and Kumho Decisions*, 8 PSYCHOL. PUB. POL'Y & L. 251, 228 (2002)).

35. This Section is not meant to criticize *Daubert* because of courts' inconsistency of application. Others have done that. Rather, a basic understanding of *Daubert* is necessary for illustrating my primary point that, given an expert who thinks a certain way, the *Daubert* test may actually mask an unreliable methodology.

36. Many state courts have also adopted *Daubert* as the gatekeeping standard for expert testimony. See Alice B. Lustre, Annotation, *Post-Daubert Standards for Admissibility of Scientific and Other Expert Evidence in State Courts*, 90 A.L.R. 5TH 453, 454-55 (2001) (determining that twenty-five states have adopted *Daubert* or a similar test; fifteen states and the District of Columbia continue to use the *Frye v. United States* "general acceptance" test; six states apply the *Daubert* factors with an emphasis on *Frye*; and four states have created their own tests). The same issues discussed in this Article would arise as courts apply *Daubert* in these states. See David E. Bernstein, *Keeping Junk Science out of Asbestos Litigation*, 31 PEPP. L. REV. 11, 23 n.72 (2003) (listing Alabama, Arizona, California, Florida, Illinois, Kansas, Maryland, Michigan, Minnesota, Missouri, New Jersey, New York, North Dakota, Pennsylvania, and Washington as *Frye* states).

37. *Daubert v. Merrell Dow Pharms., Inc.*, 509 U.S. 579, 589 (1993); *United States v. Tucker*, 345 F.3d 320, 327 (5th Cir. 2003). In *Daubert*, the Supreme Court rejected the prior "general acceptance" test for admissibility of expert witnesses espousing scientific theories and instead adopted the list of nonexclusive factors—including general acceptance—for deciding the reliability of expert testimony under Rule 702. 509 U.S. at 589.

38. In 2000, the Federal Advisory Committee amended Rule 702 to comport with *Daubert* and *Kumho*. The notes of the Advisory Committee explain that some types of expert testimony are more "objectively verifiable" under the *Daubert* factors than other types of testimony. FED. R. EVID. 702 advisory committee's note. The committee concluded that with some testimony, the courts would have to rely on "other standard principles attendant to the particular area of expertise." *Id.*

39. FED. R. EVID. 702.

Courts describe the rule as identifying three necessary prongs for admissibility: the expert must be qualified and her testimony must be relevant and reliable.<sup>40</sup>

The Supreme Court has advised trial courts to assess the reliability of an expert's theory using the following five factors: (1) whether the theory has been subjected to peer review and publication; (2) whether it has attracted widespread acceptance within a relevant scientific community; (3) whether the theory or technique has been tested; (4) its known potential error rate; and (5) the existence and maintenance of standards controlling its operation.<sup>41</sup> In *Daubert*, the Court expressly crafted these factors (which I refer to as the "typical" *Daubert* factors) to fit a scientific methodology.<sup>42</sup> Specifically, the goal of *Daubert* was, in part, to assist judges in screening out "junk science."<sup>43</sup> Justice Blackmun repeatedly referred to the scientific method: "In short, the requirement that an expert's testimony pertain to 'scientific knowledge' establishes a standard of evidentiary reliability."<sup>44</sup>

---

40. See, e.g., *Milanowicz v. Raymond Corp.*, 148 F. Supp. 2d 525, 530–31 (D.N.J. 2001) ("As configured in the Third Circuit, *Daubert* compels a three-part analysis: (1) qualifications—whether the expert is qualified to speak with authority on the subject at issue; (2) reliability—whether the expert's methodology is sound and whether his or her opinion is supported by 'good grounds;' and (3) fit—whether there is a relevant 'connection between the scientific research or test result to be presented and particular disputed factual issues in the case.'" (quoting *In re Paoli R.R. Yard PCB Litig.*, 35 F.3d 717, 741–43 (3d Cir. 1994))).

41. See *Kuhmo Tire Co. v. Carmichael*, 526 U.S. 137, 149–50 (1999) (citing *Daubert*, 509 U.S. at 592–94).

42. *Daubert*, 509 U.S. at 592–93.

43. See *Gen. Elec. v. Joiner*, 522 U.S. 136, 153 n.6 (1997) (discussing phrenology as the type of "junk science" meant to be excluded by *Daubert*); Mark S. Brodin, *Behavioral Science Evidence in the Age of Daubert: Reflections of a Skeptic*, 73 U. CIN. L. REV. 867, 871 (2005) (explaining that *Daubert* meant to rule out unreliable expert testimony by doing away with the relevant scientific community standard). One scholar described the events that preceded *Daubert* as follows:

In the mid and late 1980s, critics raised their voices in protest, saying that the kind of expertise the courts regularly accepted as admissible was frankly "junk" of scandalous lack of dependability. Voices protested the lack of reliability in both criminal and civil spheres, but the voice that finally spoke loudest and was heard most clearly, spoke almost exclusively of the injustice of junk expertise used against civil defendants. I refer, of course, to Peter Huber and his 1991 book, *Galileo's Revenge*, which popularized the phrase "junk science."

D. Michael Risinger, *Defining the "Task at Hand": Non-Science Forensic Science After Kumho Tire Co. v. Carmichael*, 57 WASH. & LEE L. REV. 767, 767–68 (2000).

44. *Daubert*, 509 U.S. at 590. In discussing Rule 702, Justice Blackmun said that "[i]ts overarching subject is the scientific validity—and thus the evidentiary relevance and reliability—of the principles that underlie a proposed submission." *Id.* at 594–95.

In *Kumho*, the Supreme Court relied on the plain language of Rule 702 to apply the *Daubert* test to nonscientific areas where “technical and other specialized knowledge” is required.<sup>45</sup> Justice Breyer focused on the “knowledge” requirement of Rule 702: “[The rule’s] language makes no relevant distinction between ‘scientific’ knowledge and ‘technical’ or ‘other specialized’ knowledge. It makes clear that any such knowledge might become the subject of expert testimony.”<sup>46</sup> Accordingly, any expert testimony, whether hard science, soft science, or nonscientific (experience-based or more technical expertise), proffered in federal court or in a *Daubert* state is now subject to *Daubert* gatekeeping.<sup>47</sup>

The Supreme Court described the *Daubert/Kumho* standard as liberal and permissive, giving courts wide latitude in terms of allowing expert testimony and deciding how to test expert testimony.<sup>48</sup> Justice Breyer also emphasized the flexibility of the test, meaning that the typical factors neither necessarily nor exclusively apply to every case.<sup>49</sup> The courts’ gatekeeping obligation is chock full of discretion.<sup>50</sup> The trial court has discretion to decide *how to determine* reliability,<sup>51</sup> just as it has discretion to determine the ultimate question of the reliability of the conclusions reached.<sup>52</sup> Many criticize the standard for its

---

45. 526 U.S. at 141. *Kumho* involved personal injury claims against the maker and distributor of a minivan tire sued after the tire blew out, causing the van to overturn in a fatal accident. *Id.* The Supreme Court decision involved the admissibility of testimony from the plaintiff’s expert, a mechanical engineer who had conducted a visual and tactile inspection of the tires. *Id.* The Supreme Court made clear that the *Daubert* test should be applied to all expert witnesses, including those with technical and other specialized knowledge, not just to those with scientific evidence. *Id.* at 148–49.

46. *Id.* at 147.

47. *Id.*

48. *See id.* at 150 (describing the *Daubert* test as flexible and inclusive). *But see* Daniel D. Blinka, *Expert Testimony and the Relevancy Rule in the Age of Daubert*, 90 MARQ. L. REV. 173, 187–88 (2006) (“[D]espite its promised ‘flexibility’ and the purported lowering of barriers to expert assistance, the federal reliability rule’s application ‘has been anything but liberal or relaxed’ as trial courts strictly scrutinize expert testimony . . . .” (quoting *Howerton v. Arai Helmet, Ltd.*, 597 S.E.2d 674, 691 (N.C. 2004))).

49. *Kumho*, 526 U.S. at 150.

50. *See id.* (relying on *Daubert* for the notion that the typical factors do not constitute a “definitive checklist or test”).

51. In terms of the reliability part of gatekeeping, Judge Harvey Brown suggests that courts admit experts whose testimony satisfies three reliability gates: connective, foundational, and methodological reliability. *See* Harvey Brown, *Eight Gates for Expert Witnesses*, 36 HOUS. L. REV. 743, 748–51 (1999). Judge Brown posits that without all three, the expert should not be admitted. *Id.* at 749. Although courts have not adopted this classification, I rely on it later to propose a more fitting gatekeeping standard for the experts described in this Article.

52. *See* Gen. Elec. v. Joiner, 522 U.S. 136, 146 (1997) (adding to the gatekeeping test the court’s role in assessing the reliability of the ultimate conclusion by allowing

permissiveness,<sup>53</sup> while some complain that it is too stringent.<sup>54</sup> Others complain about the inconsistency in courts' application of the test.<sup>55</sup>

The U.S. Court of Appeals for the Fifth Circuit has admitted expert testimony "even though multiple *Daubert* factors were *not* satisfied."<sup>56</sup> Courts at times add factors (some very broadly phrased and some specific) to the typical *Daubert* list. These "other" gatekeeping factors may include the following: whether too great an analytical gap exists between data and opinion;<sup>57</sup> whether the expert has employed the same rigor in reaching her litigation-related opinion as she would in the non-litigation arena;<sup>58</sup> whether the expert accounted for obvious alternative explanations;<sup>59</sup> and whether the expert conducted the

---

the court to determine that a conclusion makes too large a leap from the supporting data).

53. In her note concerning judicial confusion over *Daubert*, Cassandra Welch identified differences in how the circuits and various judges apply *Daubert*. Cassandra H. Welch, Note, *Flexible Standards, Deferential Review: Daubert's Legacy of Confusion*, 29 HARV. J.L. & PUB. POL'Y 1085, 1097-98 (2006). She notes that while the U.S. Court of Appeals for the Third Circuit requires that trial courts "consider all factors listed by *Daubert* as well as any other relevant factors," the U.S. Courts of Appeals for the Seventh and Ninth Circuits use the *Daubert* factors like the hearsay exception for business records. *Id.*

54. See Michael H. Graham, *The Expert Witness Predicament: Determining 'Reliable' Under the Gatekeeping Test of Daubert, Kumho, and Proposed Amended Rule 702 of the Federal Rules of Evidence*, 54 U. MIAMI L. REV. 317, 321 (2000) (criticizing *Daubert's* stringency and lack of clarity for leading to conflicting and confusing decisions); Allan Kanner & M. Ryan Casey, *Daubert and the Disappearing Jury Trial*, 69 U. PITT. L. REV. 281, 283 (2007) (citing the 2001 RAND Institute for Civil Justice study of 400 federal court decisions regarding *Daubert* to support the notion that "[t]he gatekeeping role bestowed upon the judiciary has blocked more court access than it has enabled").

55. See Robinson, *supra* note 34, at 42 ("Law is most effective in guiding judicial behavior when the law has a relatively clear rule, a relatively clear substantive meaning, or where judges face meaningful appellate oversight. *Daubert* decisions fit none of these criteria."); Welch, *supra* note 53, at 1098-99 (describing how judges are unclear on how to weigh and combine the factors, noting a judicial survey in which half of those who responded were weighing general acceptance the most heavily out of all the factors).

56. See *United States v. Simmons*, 470 F.3d 1115, 1123 (5th Cir. 2006) (citing *United States v. Norris*, 217 F.3d 262, 269-71 (5th Cir. 2000)) (holding that testimony may be admissible even if it does not satisfy two of the four or five factors).

57. See, e.g., *Gen. Elec. v. Joiner*, 522 U.S. 136, 146 (1997) (holding that the district court did not abuse its discretion by excluding expert testimony linking deaths among workers to chemical exposure, thereby validating the district court's reasoning that the gap between the data and the expert opinion was too great).

58. This is simply the *Daubert* concept of employing intellectual rigor articulated as a specific factor. See *Daubert v. Merrell Dow Pharms., Inc.*, 509 U.S. 579, 590 (1993).

59. See, e.g., *Clair v. Burlington N. R.R.*, 29 F.3d 499, 502 (9th Cir. 1994) (discussing efforts to rule out other possible causes of injuries).

research independent of litigation.<sup>60</sup> Courts display significant inconsistency in electing *when* (i.e., in what type of case, with what type of expert, etc.) to reach outside the typical *Daubert* factors; also, courts rarely explain their reasons for doing so.

At times, courts simply conflate the qualifications and reliability requirements, looking at observations, professional experience, education, and training as indicia of reliability.<sup>61</sup> In some decisions, emphasizing qualifications while barely addressing methodology appears deliberate. In fact, Judge Harvey Brown posits that courts should rely primarily on qualifications as a reliability factor when the expert's specialized knowledge derives from experience rather than from a particular methodology.<sup>62</sup> He cites Professor Imwinkelried for the idea that "for experience-based expert testimony, reliability should focus on the breadth of the expert's detailed experiences."<sup>63</sup> And while this certainly makes sense, using observations and training as indicia of reliability for certain types of expertise (e.g., the police investigator testifying as an expert about a criminal modus operandi based on the officer's thirty years of experience and training), the court should still examine the expert's methodology and explain the court's reason for leaning so heavily on qualifications to decide reliability.

Ultimately, the reliability of an expert's methodology is critical to the trustworthiness of her conclusions; yet, courts often fail to scrutinize it, particularly when the nature of the expertise is foreign

---

60. *Daubert v. Merrell Dow Pharms., Inc.*, 43 F.3d 1311, 1317 (9th Cir. 1995) (describing this issue as "a very significant fact to be considered").

61. Commentators argue that for certain types of expertise, these factors are much more suitable for testing the reliability of methodology than are the four "typical" factors because of trial courts' idealized views of hard sciences. David S. Caudill & Lewis L. LaRue, *Why Judges Applying the Daubert Trilogy Need to Know about the Social, Institutional, and Rhetorical—and Not Just the Methodological—Aspects of Science*, 45 B.C. L. REV. 1, 33 (2003); see *In re Paoli R.R. Yard PCB Litig.*, 35 F.3d 717, 742 n.8 (3d Cir. 1994) (listing the qualifications of the expert as one of the factors for determining the reliability of scientific evidence in the Third Circuit).

62. See Brown, *supra* note 51, at 830. Judge Brown identifies eight gates through which an expert's testimony must pass for admissibility. The testimony must satisfy the following tests: (1) assist the trier of fact; (2) pass the qualifications requirement; (3) satisfy the relevance test; (4) pass the reliability test in terms of methodology ("methodological reliability"); (5) satisfy the "connective reliability" requirement by ensuring that the connection between the opinion and the conclusion is sound; (6) pass the "foundational reliability" test by ensuring the foundation underlying an expert's opinion is reliable; (7) satisfy the "foundational data" reliability test; and (8) pass the "unfair prejudice" test. *Id.* at 746–51. He identifies three separate reliability gates: foundational, methodological, and connective. *Id.* at 828–29.

63. *Id.* at 834 (citing Imwinkelried, *supra* note 16, at 2292). Brown's position is essentially that these experts are not employing a methodology for a particular case, as opposed to technical experts.

to the court.<sup>64</sup> The obvious irony is that the more elusive the nature of expertise (thus suggesting the need for an exacting analysis), the more lax the courts' scrutiny of methodology.

## 2. *Degrees of Rigor*

The second troubling aspect of *Daubert* is the varying degrees of rigor with which trial courts currently apply the standard. To fulfill their gatekeeping obligation, some courts treat the standard as exacting, while other courts gloss over the factors, paying only scant attention to whether the methodology satisfies any test.

In addition, some courts look to the "types" of experts and apply the reliability test to the type, rather than to the individual expert's methodology. I use the phrase "categorical review" to describe a review where courts evaluate a type of expert—a fingerprinting expert, for example—and deem the type admissible without analyzing the expert's methodology. In *United States v. Crisp*,<sup>65</sup> for example, the U.S. Court of Appeals for the Fourth Circuit assessed the reliability of fingerprinting experts in general, without assessing the methodology of the government's expert.<sup>66</sup> On appeal, the defendant challenged the admission of the fingerprinting experts on the grounds that fingerprint analysis had no established error rate.<sup>67</sup> The Fourth Circuit summarily rejected the argument, finding that courts and other fingerprinting experts had routinely accepted this type of expertise as reliable: "While [the defendant] may be correct that further research, more searching scholarly review, and the development of even more consistent professional standards is desirable, he has offered us no reason to reject outright a form of evidence that has so ably withstood the test of time."<sup>68</sup> In a strong dissent, Judge Michael posited that the majority had improperly

---

64. See, e.g., *infra* Part II.B (surveying cases in which courts engaged in little or no scrutiny of the expert's methodology when admitting testimony concerning the origins, operations, and ideology of terrorist networks).

65. 324 F.3d 261 (4th Cir. 2003).

66. See *id.* at 269 ("[T]he district court was well within its discretion in accepting at face value the consensus of the expert and judicial communities that the fingerprint identification technique is reliable.").

67. *Id.* at 268.

68. *Id.* at 269. The U.S. Court of Appeals for the Fourth Circuit provides virtually no review and shifts the burden to the defendant to prove that the expertise is not reliable. See *id.*

“grandfathered” fingerprint evidence, failing to analyze it under the existing *Daubert* standard.<sup>69</sup>

Similarly, in *United States v. Williams*,<sup>70</sup> the U.S. Court of Appeals for the Second Circuit described, with approval, the lower court’s cursory *Daubert* review, in which the trial court first noted the firearms expert’s qualifications and then based its reliability determination on those qualifications and the fact that the expert had testified in prior cases.<sup>71</sup> While describing the expert’s qualifications, the court noted approvingly “her prior expert testimony on between 20 and 30 occasions.”<sup>72</sup> The Second Circuit agreed with the trial court’s reasoning, making the confusing statement: “The trial court’s admission of Kuehner’s testimony constituted an implicit determination that there was a sufficient basis for doing so.”<sup>73</sup>

In similarly cursory reviews, some trial courts admit expert testimony simply because the expert professes that her methodology is reliable. In a decision out of the Western District of Texas, the court found an expert’s methodology reliable because he had co-authored two books in the pertinent field, and because he “testified that his opinions are based on his knowledge as one of ordinary skill in the art, and that he is ‘100 percent knowledgeable of the opinions that are expressed.’”<sup>74</sup>

As this Article discusses below, a number of courts have engaged in a relaxed review of Kohlmann’s proposed testimony, focusing on his qualifications and the magnitude of his collection of data regarding international terrorism.<sup>75</sup> Courts tend to rely heavily on the fact that prior courts have admitted Kohlmann’s testimony, treating those prior decisions as precedent for the court’s admissibility decision.

In contrast, in a “strict scrutiny” review, a trial court carefully studies an expert’s methodology in the context of her field. For example, in *United States v. Masferrer*,<sup>76</sup> the trial court assessed the

---

69. *Id.* at 272 (Michael, J., dissenting) (arguing that the government failed to prove that the expert identification evidence satisfied the *Daubert* standard or that it was otherwise reliable).

70. 506 F.3d 151 (2d Cir. 2007).

71. *Id.* at 161–62.

72. *Id.* at 161.

73. *Id.* (qualifying the court’s opinion by stating that it should not be “taken as saying that any proffered ballistic expert should be routinely admitted”).

74. See *Oilfield Equip. Mktg., Inc. v. New Tech Sys., Inc.*, No. MO-02-CA-183, 2004 WL 5499507, at \*3 (W.D. Tex. Mar. 26, 2004).

75. See *infra* Part II.B (surveying the scrutiny that courts have applied to the proffered testimony of Kohlmann in terrorism cases).

76. 367 F. Supp. 2d 1365 (S.D. Fla. 2005).

reliability of an expert on banking transactions.<sup>77</sup> The expert was a professor of international finance law, international trade law, and international banking transactions.<sup>78</sup> The government hired the expert to opine on a series of transactions; the expert would testify at trial that the loans at issue were not independent transactions but were instead swap exchanges.<sup>79</sup>

In assessing the reliability of the expert's methodology, the trial court outlined what material the expert had reviewed and how he had reached his conclusions.<sup>80</sup> The trial court also noted what material the expert had *not* reviewed in arriving at his conclusions.<sup>81</sup> Based on these omissions, the trial court ruled that the expert was not reliable.<sup>82</sup> In doing so, the court conducted an "exacting analysis" of the expert's methodology, looking closely at how the expert arrived at his conclusions. For better or worse, this assessment reflects an entirely different gatekeeping standard than the standard employed in the cases described above.

The purpose of this Article is not to identify which circuits are applying rigorous review in which types of cases, but rather to highlight the absence of a consistent standard. Courts differ both in terms of factors used and degree of rigor applied, such that in some cases, judges scrutinize expert methodology meticulously, while in other decisions, judges relax their scrutiny, ignoring parts of the

---

77. *Id.* at 1375–76.

78. *Id.* at 1374.

79. *Id.* at 1375.

80. *See id.* at 1374–75 (identifying the exact materials used by the expert to conduct his analysis, including trade slips, faxes, emails, and other internal memoranda).

81. *Id.* at 1375. The trial court noted the specific material that the expert omitted from his review:

[The expert] (1) did not look at the fundamentals of the loans or the borrowers; (2) did not look at whether the loans were repaid; (3) did not look at whether or not the OCC required reserves on these loans; (4) did not look at whether any payments on these loans were affected by the moratorium; (5) did not do other research on value; and (6) did not review Hamilton Bank's portfolio.

*Id.* (citations omitted).

82. *See id.* at 1375–76 (finding that "[the expert's] proposed testimony [was] merely conclusory, unreliable, and fail[ed] to specifically identify the methodology or reasoning he used" to arrive at his conclusions).

assessment or applying such mild scrutiny that it is almost absent.<sup>83</sup> The result is a standardless standard.<sup>84</sup>

## B. Procedure

### 1. To Hear or Not to Hear

Generally, federal appellate courts do not require a *Daubert* hearing, though some circuits require that the record reflect a trial court's *Daubert* findings.<sup>85</sup> In a recent case involving a firearms identification expert, the Second Circuit agreed with the trial court that a separate hearing concerning the *Daubert* challenge was not necessary.<sup>86</sup> According to the Second Circuit, before presenting the expert to the jury, the government "provided an exhaustive foundation for [the expert's] expertise."<sup>87</sup> The court also highlighted that the expert had testified on twenty to thirty prior occasions.<sup>88</sup>

---

83. Again, an empirical study of which judges, in which types of cases (i.e., civil or criminal), with which types of experts (i.e., soft or hard science), employ which standards (and to what degree) is not the purpose of this Article. Yet, someone could undertake such a study.

84. Commentators Kanner and Casey have criticized the exacting scrutiny that some judges use in applying *Daubert*, objecting that *Daubert* has become a common tool for keeping cases from going to trial:

*Daubert*, with its many criteria, allows a judge to focus on just one criteria, weigh it unevenly, and use it to prevent expert testimony (in many cases central to a plaintiff's entire case) from reaching the courtroom. . . . With remarkable speed, judges have gone far beyond throwing the clinical ecologists out of the courtroom. Impressed by artful defense counsels' smoke screens, they are now excluding testimony of well-regarded experts.

Kanner & Casey, *supra* note 54, at 306 (citations omitted). In light of this commentary, *Daubert* comes across as an entirely different type of test. See Robinson, *supra* note 34, at 68–69 ("[O]ne emerging scholarly consensus views federal courts as taking a relatively liberal position in criminal cases (particularly where the state's evidence is concerned) while being much more restrictive in civil cases.").

85. The U.S. Court of Appeals for the First Circuit acknowledged that *Daubert* probably requires some sort of preliminary determination of admissibility, but the court has held that lower courts are not required to act *sua sponte* in making explicit rulings on the record concerning expert testimony. See *Hoult v. Hoult*, 57 F.3d 1, 4–5 (1st Cir. 1995) (concluding that the trial court need only "consider" making a ruling on the admissibility of expert testimony). The Fourth Circuit does not require a hearing. See *United States v. Davis*, 602 F. Supp. 2d 658, 663 (D. Md. 2009) ("It is clear that a court is not required to hold a hearing simply because a party has raised a *Daubert* issue."). Nor does the U.S. Court of Appeals for the Fifth Circuit. See *Oilfield Equip. Mktg., Inc. v. New Tech Sys., Inc.*, No. MO-02-CA-183, 2004 WL 5499507, at \*3 (W.D. Tex. Mar. 26, 2004) ("A trial court is not required to hold a *Daubert* hearing before ruling on the admissibility of scientific evidence.").

86. *United States v. Williams*, 506 F.3d 151, 162 (2d Cir. 2007) (holding that the trial court did not abuse its discretion in denying the defendant's request for a *Daubert* hearing).

87. *Id.* at 161.

88. *Id.*

Thus, the trial court was not required to hold a separate *Daubert* hearing.<sup>89</sup>

Other appellate courts draw on a range of factors when determining whether a *Daubert* hearing is necessary. The U.S. Court of Appeals for the Ninth Circuit has held that a *Daubert* trial is not required where the expert has extensive experience and provides relatively straightforward evidence that is easy to follow.<sup>90</sup> The U.S. Court of Appeals for the Sixth Circuit, on the other hand, has held that a trial court abuses its discretion in a criminal trial by not holding a *Daubert* hearing before excluding expert testimony that is heavily relied upon.<sup>91</sup> The U.S. Court of Appeals for the Third Circuit takes a hybrid approach, requiring a *Daubert* hearing when a party seeks to offer expert testimony on a complex issue.<sup>92</sup> The court also requires a *Daubert* hearing when an expert's methodology is difficult to determine and the expert's conclusions thus cannot be verified.<sup>93</sup> Thus, certain circuits require greater accountability from trial courts than other appellate courts. The trial courts in these circuits must make specific findings on the record regarding the reliability of the expert's methodology.<sup>94</sup> The appellate court can then review the "sufficiently developed record" to ensure that the trial court satisfied its gatekeeping requirement.<sup>95</sup> Accordingly, while these circuits do not require a separate *Daubert* hearing, trial courts must make sufficient findings on the record to (presumably) allow

---

89. *Id.* at 162.

90. *See, e.g.*, *United States v. Lopez-Martinez*, 543 F.3d 509, 514–15 (9th Cir. 2008) (explaining that the testimony from the expert—a border patrol agent—"was neither rocket science nor complex statistical modeling"), *cert. denied*, 129 S. Ct. 1021 (2009).

91. *See, e.g.*, *United States v. Smithers*, 212 F.3d 306, 314 (6th Cir. 2000) (concluding that the trial court should have held a *Daubert* hearing on the reliability of eyewitness identification where the prosecution's case relied almost entirely on eyewitness accounts).

92. *See, e.g.*, *Wicker v. Consol. Rail Corp.*, 371 F. Supp. 2d 702, 711–12 (W.D. Pa. 2005) (noting that toxic exposure cases present many complex issues and that the Third Circuit had required a *Daubert* hearing in similar circumstances (citing *Padillas v. Stork-Gamco, Inc.*, 186 F.3d 412 (3d Cir. 1999))).

93. *See, e.g.*, *Oddi v. Ford Motor Co.*, 234 F.3d 136, 155 (3d Cir. 2000) (noting that a *Daubert* hearing is necessary if the court is unable to determine how the expert reached her opinion (citing *Elcock v. Kmart Corp.*, 233 F.3d 734, 745 (3d Cir. 2000))).

94. *See, e.g.*, *Dodge v. Cotter Corp.*, 328 F.3d 1212, 1223 (10th Cir. 2003) ("*Kumho* and *Daubert* make it clear that the [trial] court must, on the record, make *some* kind of reliability determination." (quoting *United States v. Velarde*, 214 F.3d 1204, 1209 (10th Cir. 2000))).

95. *See, e.g., id.* (concluding that the absence of detailed findings as to the reliability of the expert testimony must lead the appellate court to find that the trial court abused its discretion in admitting the testimony).

for meaningful appellate review. Again, courts are afforded discretion in deciding the procedures for *Daubert* decision-making.

## 2. *Proponent's Burden*

Courts also apply the proponent's burden inconsistently. Pursuant to Federal Rules of Evidence 104(a) and 702, the party proffering an expert witness must establish that the testimony is admissible (i.e., the expert is qualified and the testimony is relevant and reliable) by a preponderance of the evidence.<sup>96</sup>

Although the burden lies with the proponent of the expert to establish admissibility, courts frequently require the party challenging the expert to establish the absence of reliability. For instance, in a recent case involving faulty reporting of truck-driver backgrounds, the plaintiff truck drivers called a political science professor to testify as to the accuracy of reporting practices.<sup>97</sup> In assessing the reliability of the plaintiff's expert's methodology and conclusions, the trial court admitted the expert, holding that the reliability question should go to the weight of the expert's testimony because the defendant "[had] not demonstrated that the basis of [the expert's] opinion testimony [was] so unreliable in these areas that the testimony should not be admitted."<sup>98</sup> Accordingly, the trial court admitted the testimony because the party challenging the expert had not shown the absence of reliability (rather than requiring the plaintiff to establish the reliability of the expert's methodology).<sup>99</sup> Thus, in terms of general problems with *Daubert* gatekeeping, courts tend to stray from the mandate that they impose the burden of establishing admissibility on the expert's proponent.

## 3. *Appellate Review*

Today, in practice, appellate courts vary significantly in terms of how searchingly they review trial court admissibility decisions. As shown above, some appellate courts carefully examine the expert's

---

96. FED. R. EVID. 104(a); FED. R. EVID. 702 advisory committee's note ("[T]he admissibility of all expert testimony is governed by the principles of Rule 104(a)."); *Moore v. Ashland Chem., Inc.*, 151 F.3d 269, 276 (5th Cir. 1998) (en banc) ("*Daubert* instructs us that the district court must determine admissibility under Rule 702 by following the directions provided in Rule 104(a).").

97. *Owner-Operator Indep. Driver Ass'n v. Usis Commercial Serv.*, No. 04-cv-01384-REB-CBS, 2006 WL 2164661, at \*3-4 (D. Colo. July 31, 2006).

98. *Id.* at \*4.

99. *See id.* (finding instead that areas of questionable reliability are "ripe for cross-examination").

methodology to decide whether the trial court got it right,<sup>100</sup> while others rubber-stamp the trial court's decision.<sup>101</sup>

In theory, appellate courts are to review trial court admissibility decisions for abuse of discretion and sustain the decisions unless they are manifestly erroneous.<sup>102</sup> Commentators have advocated for *de novo* appellate review, arguing that such review would be more meaningful<sup>103</sup> and that it would promote uniformity with certain "trans-case" issues.<sup>104</sup> Yet, this proposal is certainly not the panacea for the problems described herein. Rather, it would merely shift the problem from trial courts (which lack standards and guidance) to appellate courts (which also lack standards and guidance), with the added detriment of enormous inefficiency. Accordingly, I do not advocate shifting to *de novo* review, but rather rejuvenating *Daubert* so trial courts can (and will) adequately account for how an expert approaches an issue.

This brings us to the fox and the hedgehog. As shown, the *Daubert* factors were meant to fulfill a particular objective relating to reliability of scientific expertise. Courts now apply these factors (in varying forms and using varying degrees of rigor) to test reliability of all types of expert testimony. Yet, when viewing expertise through the lens of Berlin's fox/hedgehog dichotomy, the factors are not only

---

100. See, e.g., *Jahn v. Equine Svcs., PSC*, 233 F.3d 382, 392–93 (6th Cir. 2000) (holding that the trial court abused its discretion in excluding two veterinarian experts' testimony and finding instead that the experts' opinions were "based on undisputed objective medical facts" and "scientifically-based methodology" and therefore admissible).

101. See, e.g., *United States v. Williams*, 506 F.3d 151, 161 (2d Cir. 2007) (finding no abuse of discretion in the trial court's admission of testimony without a *Daubert* hearing).

102. *General Elec. Co. v. Joiner*, 522 U.S. 136, 141–42 (1997); *Satcher v. Honda Motor Co.*, 52 F.3d 1311, 1317 (5th Cir. 1995) (citing *Christophersen v. Allied-Signal Corp.*, 939 F.2d 1106, 1109 (5th Cir. 1991), *cert. denied*, 503 U.S. 912 (1992)).

103. As one hopeful scholar imagined:

Finally, a time may come when the courts rule that the abuse of discretion standard used in reviewing admissibility may have to be changed to a *de novo* review standard. *De novo* appellate decisions based on *Daubert* would allow examination of the expert testimony, not merely the actions of the trial judge, and thus provide a higher level of review in admissibility rulings.

Todd R. Samelman, Comment, *Junk Science in Federal Courts: Judicial Understanding of Scientific Principles*, 6 J. TECH. L. & POL'Y 263, 271 (2001). But see CAUDILL & LARUE, *supra* note 14, at 64–65 (contending that arguments for *de novo* review represent "an idealization of appellate judges as the solution to the problem of bad science in the courtroom").

104. See Michael J. Saks, *The Aftermath of Daubert: An Evolving Jurisprudence of Expert Evidence*, 40 JURIMETRICS J. 229, 234 (2000) ("Thus, appellate courts should review case-specific evidence rulings deferentially and trans-case scientific issues *de novo*, and lower courts should treat appellate decisions on trans-case scientific issues as they would holdings of law.").

ill-suited but also, at times, wholly at odds with the underlying objectives of *Daubert*.

## II. THE FOX, THE HEDGEHOG, AND BIAS: WHAT HAPPENS WHEN THE HEDGEHOG (OR THE FOX) TESTIFIES AS AN EXPERT WITNESS

Berlin's dichotomy shows why courts, to vet expert testimony effectively, should consider *how* an expert thinks, rather than simply *what* an expert thinks.<sup>105</sup> Berlin characterized Dante, Plato, Dostoevsky, and Nietzsche as hedgehogs; he considered Shakespeare, Aristotle, and Joyce to be foxes.<sup>106</sup> He described the hedgehog types, known for their dogged persistence, as those who "relate everything to a single central vision, one system, less or more coherent or articulate, in terms of which they understand, think and feel."<sup>107</sup> Foxes, presumably because they are shrewd and cunning, "entertain ideas that are centrifugal rather than centripetal; their thought is scattered and diffused, moving on many levels, seizing upon the essence of a vast variety of experiences and objects."<sup>108</sup>

I characterize Evan Kohlmann, the expert most frequently proffered by the government in the group of cases this Article describes below, as a hedgehog-type expert. Kohlmann has achieved celebrity status as a specialist in tracking terrorists.<sup>109</sup> He runs a counterterrorism blog, has authored a book on counterterrorism, and frequently comments on NBC News about counterterrorism issues.<sup>110</sup> Courts routinely admit Kohlmann to testify on the background, origin, and structure of terrorist organizations, despite forceful defense objections concerning the reliability of Kohlmann's methodology.

---

105. Cf. Eric Schurenberg, *Why the Experts Missed the Crash*, CNN MONEY.COM, Feb. 18, 2009, [http://money.cnn.com/2009/02/17/pf/experts\\_Tetlock.moneyomag/index.htm?postversion=2009021808](http://money.cnn.com/2009/02/17/pf/experts_Tetlock.moneyomag/index.htm?postversion=2009021808) (finding the fox/hedgehog distinction to be predictive of the accuracy of economic and policy experts).

106. BERLIN, *supra* note 2, at 437.

107. *Id.* at 436.

108. *Id.* at 436-37.

109. See Robert Strauss, *Terrorists Beware: Kohlmann Is on the Case*, PENN LAW JOURNAL, Fall 2006, <http://www.law.upenn.edu/alumni/alumnijournal/Fall2006/feature3/kohlmann.html> (profiling Kohlmann as one of five "All-Star" graduates of the University of Pennsylvania Law School for his work as an expert on counterterrorism). After the 9/11 attacks, Kohlmann said, "Doing a sort of scientific research like I had and then seeing it on TV, well, it was completely different. I turned to a classmate and said, 'This is Osama Bin Laden, and I have to go do something about it.'" *Id.*

110. *Id.*

A. *The Fox and the Hedgehog*

In the early 1950s, philosopher Isaiah Berlin used the fox/hedgehog distinction to illustrate different cognitive styles.<sup>111</sup> Berlin compared the hedgehog's single, focused worldview and vision, which informs all of its opinions, with the fox's more diffuse, cautious, and open-minded approach.<sup>112</sup> Foxes tend toward self-doubt and are thus more likely to adjust their views as necessary, while hedgehogs tend toward more extreme positions.<sup>113</sup> In his essay, Berlin posits that Leo Tolstoy was a fox who wanted to be a hedgehog.<sup>114</sup>

In the early 1990s, paleontologist Stephen Jay Gould applied the fox/hedgehog distinction to his ideal of science and humanities joining forces to achieve a greater good.<sup>115</sup> He described the fox/hedgehog differences in intellectual approaches as follows:

Foxes (the great ones, not the shallow or showy grazers) owe their reputation to a light (but truly entertaining) spread of real genius across many fields of study, applying their varied skills to introduce a key and novel fruit for other scholars to gather and improve . . . . Hedgehogs (the great ones, not the pedants) locate one vitally important mine, where their particular and truly special gifts cannot be matched.<sup>116</sup>

Gould did not favor one approach in his book; rather, he described the virtues of both styles and expressed the ideal of the two combined, like the ideal of science and humanities conjoined.<sup>117</sup>

Professor Philip Tetlock used Berlin's distinction to categorize two different types of political forecasters: ones with a single, dominant worldview and ones with a more scattered, diffuse view of things.<sup>118</sup> According to Tetlock, how forecasters approach an issue is a much more significant factor in likelihood of success than education or experience.<sup>119</sup> "The propensity of hedgehogs to push their favorite first principles as far as possible, and sometimes beyond, arose on

---

111. BERLIN, *supra* note 2, at 436.

112. *Id.* at 436–37.

113. *Id.*

114. *Id.* at 438 (finding that the fox/hedgehog distinction between Tolstoy's nature and his beliefs was reflected most clearly in Tolstoy's view of history).

115. Gould, *supra* note 1, at 5.

116. *Id.*

117. *Id.* at 5–6.

118. TETLOCK, *supra* note 6.

119. *Id.* at 106, 117–18; *see also* Schurenberg, *supra* note 105 (interviewing Philip Tetlock about the results of his survey in which he tracked 82,000 predictions by 284 experts and assessed the validity of their responses).

numerous occasions.”<sup>120</sup> He describes the virtues of the fox-like approach (or the detriments to the hedgehog approach) as follows: “Once many hedgehogs boarded a train of thought, they let it run full throttle in one policy direction for extended stretches, with minimal braking for obstacles that foxes took as signs they were on the wrong track.”<sup>121</sup>

Tetlock posits that hedgehogs—who are more apt to simply cast aside contradictory evidence because it conflicts with their worldview, without assessing how it may impact the analysis or why it is contradictory—are more appealing to the media because of their steadfast positions and their ability to articulate their positions in compelling sound bites.<sup>122</sup>

In the political forecasting arena, Tetlock has a bias: he favors the fox for accuracy.<sup>123</sup> Tetlock describes attributes of the fox in political forecasting as follows: “[F]oxes are still wary of grand generalizations: they draw lessons from history that are riddled with probabilistic loopholes and laced with contingencies and paradoxes.”<sup>124</sup> Foxes are more open-minded and willing to integrate contrary evidence or approaches; thus, with regard to the USSR in 1988, Tetlock explained: “The greater emotional detachment of foxes proved helpful during the endgame phase of the glasnost and perestroika period. Some foxes had a remarkable flair for piecing together discordant arguments . . . .”<sup>125</sup>

Hedgehogs, on the other hand, “dig themselves into intellectual holes.”<sup>126</sup> Yet, because of the hedgehogs’ eagerness for resolution with a sure, simple answer, the media favors the hedgehog.<sup>127</sup> Tetlock posits that this is because “simple, decisive statements are easier to package in sound bites.”<sup>128</sup> So, as Tetlock concludes, the attributes that detract from their ability to accurately forecast the future make hedgehogs appealing political pundits.<sup>129</sup>

---

120. TETLOCK, *supra* note 6, at 89.

121. *Id.* at 100.

122. *Id.* at 119. In her review of Tetlock’s book, Ellen Goodman said this of media experts: “In our media world, the more certain the expert, the more celebrated. And yet the more celebrated, the more likely he or she is to be wrong.” Ellen Goodman, *Hedgehogs and Foxes*, BOSTON GLOBE, Dec. 30, 2005, at A19.

123. TETLOCK, *supra* note 6, at 117–18.

124. *Id.* at 144–45.

125. *Id.* at 107.

126. *Id.* at 118.

127. *Id.* at 119.

128. *Id.*

129. *Id.*

In describing the end result, Tetlock concludes that while “[f]oxes are not awe-inspiring forecasters,” they avoid “many of the big mistakes that drive down the probability scores of hedgehogs to approximate parity with dart-throwing chimps.”<sup>130</sup> Tetlock also concludes that the fox is more often right—this expert is typically a better predictor of political and economic outcomes because of her more resilient approach.<sup>131</sup>

I borrow Berlin’s classification—which Tetlock applies to experts in the political-strategy arena—and apply it to nonscientific experts in the courtroom arena.<sup>132</sup> This dichotomy demonstrates, in a way that is different than past illustrations, the peril of continuing to rely on our existing *Daubert* gatekeeping system, and gives courts a reason to take seriously the need to reconstruct *Daubert*. As shown below, hedgehog-type experts like Kohlmann typically are compelling witnesses for the media, the government, the jury, and—perhaps most importantly—the judge, who typically admits this expert despite *Daubert* objections regarding reliability and qualifications.

#### B. *Evan Kohlmann—“Celebrity Expert”*

Evan Kohlmann, who has been admitted to testify as the government’s expert witness in at least fifteen terrorism trials in this country,<sup>133</sup> has been called “the Doogie Howser of terrorism” because Kohlmann was relatively young when he became a popular, self-made expert on this subject.<sup>134</sup> He refers to himself as a “private sector International Terrorism Consultant who has spent over a decade tracking Al-Qaida and other terrorist organizations.”<sup>135</sup>

Kohlmann has an undergraduate degree in international politics from *Georgetown University* and a law degree from the *University of Pennsylvania Law School*.<sup>136</sup> He contributes to the Counterterrorism

130. *Id.* at 118.

131. See Schurenberg, *supra* note 105 (“The better forecasters were like Berlin’s foxes: self-critical, eclectic thinkers who were willing to update their beliefs when faced with contrary evidence . . .” (quoting Philip Tetlock in an interview)).

132. The distinction can also be applied to scientific experts. See GOULD, *supra* note 5.

133. Global Terror Alert, About Evan Kohlmann, <http://www.globalterroralert.com/about/11-research-partners/8-about-evan-kohlmann.html> (last visited Feb. 3, 2010).

134. See Tom Mills, *Evan Kohlmann; the Doogie Howser of Terrorism?*, SPINWATCH, Apr. 29, 2008, <http://www.spinwatch.org/-articles-by-category-mainmenu-8/74-terror-spin/4850-> (comparing Kohlmann to Doogie Howser, the main character in a television sitcom about a boy who became a well-respected doctor when he was fourteen years old).

135. Global Terror Alert, *supra* note 133.

136. *Id.*

Blog<sup>137</sup> and is “an exclusive on-air terrorism analyst for NBC News.”<sup>138</sup> Kohlmann wrote a book about terrorist networks in Bosnia while he was in law school.<sup>139</sup> In the United States (and possibly abroad), he is something of a celebrity terrorism expert.<sup>140</sup>

Kohlmann is also known for creating a video about al-Qaida that the government uses during trials of Guantánamo prisoners.<sup>141</sup> The ninety-minute video, called “The Al Qaeda Plan” (to make it reminiscent of “the Nazi Plan” film used during the Nuremberg trials), depicts, for example, mangled corpses after the 1998 U.S. Embassy bombing in Kenya.<sup>142</sup> According to the military tribunal’s chief prosecutor, Army Colonel Lawrence Morris, the film was meant to stir emotions: “It is prejudicial, which is why we show it.”<sup>143</sup>

I use the five cases below to illustrate the nature of Kohlmann’s proposed testimony (based on his expert reports) and the typical court scrutiny of Kohlmann’s methodology (their *Daubert* analysis) before admitting him to testify. Courts have admitted Kohlmann to testify in ten other federal court cases in this country, reviewing his expertise in much the same way as in the cases described below.<sup>144</sup>

Kohlmann’s expert reports reflect a single, unwavering worldview concerning the structure, organization, and background of the organizations he tracks, and (more importantly) the forces driving the individuals, publications, and organizations associated with those organizations.<sup>145</sup> Typically, the defendant in these cases is charged with supporting (by supplying classified information to or providing funding for) a particular terrorist source or organization, knowing or intending that the support be used to kill United States nationals.<sup>146</sup>

---

137. Counterterrorism Blog, <http://counterterrorismblog.org/> (last visited Feb. 3, 2010). Kohlmann describes his blog as “[t]he first multi-expert blog dedicated solely to counterterrorism issues.” *Id.*

138. Global Terror Alert, *supra* note 133.

139. EVAN KOHLMANN, *AL-QAIDA’S JIHAD IN EUROPE: THE AFGHAN-BOSNIAN NETWORK* (Berg 2004).

140. Global Terror Alert, *supra*, note 133. Kohlmann has also testified as a terrorism expert in cases in the United Kingdom, Australia, Denmark, and Bosnia-Herzegovina. *Id.*

141. Carol J. Williams, *Guantanamo Jurors Shown Graphic Film on Al Qaeda*, L.A. TIMES, July 29, 2008, at A8 (noting that Kohlmann was paid \$20,000 to produce the film and \$25,000 to appear before the war crimes tribunal).

142. *Id.*

143. *Id.*

144. See Global Terror Alert, *supra* note 133 (noting that Kohlmann has provided testimony in fifteen federal cases).

145. See generally EVAN F. KOHLMANN, *EXPERT REPORT: U.S. v. HASSAN ABU JIHAAD* (2007), <http://www.nefafoundation.org/miscellaneous/abujihadexpertreport.pdf>.

146. Typically, these cases are prosecuted under the material support to terrorism statute, 18 U.S.C. § 2339B (2000), which provides that “[w]hoever . . . knowingly

In his expert reports, Kohlmann deftly links a particular Arabic publication, website, or organization (typically the one the defendant allegedly supported) to terrorist recruitment.<sup>147</sup> He then establishes the link between recruiting terrorists and Osama Bin Laden.<sup>148</sup> And then, obviously, he links Bin Laden to the jihadist objective of killing American nationals.<sup>149</sup> In these cases, Kohlmann repeatedly, vividly,<sup>150</sup> and emphatically highlights these connections throughout his expert reports.

In *United States v. Abu-Jihaad*,<sup>151</sup> the government proffered Kohlmann to testify in a case against defendant Hassan Abu-Jihaad for supplying classified information to Azzam Publications.<sup>152</sup> As part of its burden, the government was required to prove that Abu-Jihaad provided material support to Azzam Publications “knowing or intending that the support be used to kill United States nationals.”<sup>153</sup> The government called Kohlmann to testify as to “the history, structure, and goals of al Qaeda, the recruitment of Muslim fighters, mujahideen activities in Bosnia, Chechnya, and Afghanistan . . . and the role of Azzam Publications among the mujahideen.”<sup>154</sup> Judge Kravitz permitted Kohlmann’s testimony on these issues, but he excluded any of Kohlmann’s testimony regarding the defendant himself or his motivations.<sup>155</sup>

In his nineteen-page expert report, Kohlmann identified Azzam Publications as the “undisputed top mujahideen propaganda site on the Internet,”<sup>156</sup> describing it as follows:

Over time, several shadowy U.K.-based entities have gained notorious reputations for independently translating Al-Qaida

---

provides material support or resources to a foreign terrorist organization, or attempts or conspires to do so, shall be fined under this title,” *id.*

147. *See, e.g.*, KOHLMANN, *supra* note 145, at 9 (linking Azzam Publications to terrorist recruitment).

148. *See, e.g., id.* at 3 (discussing Azzam’s terrorist recruitment as furthering al-Qaida’s goals as intended by Osama Bin Laden, Azzam, and others who formed al-Qaida).

149. *See, e.g., id.* at 3–4 (noting the al-Qaida terrorist attack on the U.S.S. Cole).

150. The language in Kohlmann’s expert reports is not histrionic, though he certainly uses language effectively to create vivid images of whatever he is describing.

151. 553 F. Supp. 2d 121 (D. Conn. 2008).

152. Allegedly, Azzam Publications played a role in disseminating information supporting al-Qaida and the mujahideen. *See id.* at 124.

153. *Id.*

154. *Id.* at 123.

155. *See id.* at 127 (noting that Kohlmann should not testify directly about the defendant’s motivations to order jihadi videos from Azzam Publications because it would “usurp[] the jury’s function” (citing *United States v. Dukagjini*, 326 F.3d 45, 54 (2d Cir. 2003))).

156. KOHLMANN, *supra* note 145, at 9.

multimedia and re-releasing videos in English for the purposes of terrorist recruitment—but perhaps none more so than Azzam Publications in London. Between approximately the years of 1996 and 2002, Azzam Publications reigned . . . featuring jihad training manuals, interviews with Al-Qaida leaders and associates, and the stories of many fallen jihadi ‘martyrs.’<sup>157</sup>

Kohlmann described the relationship between the man Azzam (whom Kohlmann identified as “overwhelmingly accepted and revered as the ‘godfather’ of modern military jihad”)<sup>158</sup> and his “top student” Osama Bin Laden. And, providing background on al-Qaida, he went on to describe a meeting convened by Osama Bin Laden:

Bin Laden and other Middle Eastern terrorist leaders in attendance jointly agreed that ‘the ruling to kill the Americans and their allies—civilians and military—is an individual duty for every Muslim who can do it in any country in which it is possible to do it.’<sup>159</sup>

Kohlmann included in his report the “final call” of Azzam: “We shall continue the Jihad no matter how long the way is until the last breath and the last beating of the pulse or we see the Islamic state established.”<sup>160</sup>

In terms of his methodology, Kohlmann included one paragraph at the beginning of his expert report in *Abu-Jihaad* describing his methods as follows:

As part of my research beginning in approximately 1997, I have traveled overseas to interview known terrorist recruiters and organizers (such as Abu Hamza al-Masri) and to attend underground conferences and rallies; I have reviewed thousands of open source documents; and, I have amassed one of the largest digital collections of terrorist multimedia and propaganda in the world. The open source documents in my collection include sworn legal affidavits, original court exhibits, video and audio recordings, text communiqués, and eyewitness testimonies.<sup>161</sup>

Kohlmann went on to list the other cases in which he had testified “as an approved expert witness” and quoted another court’s decision admitting him to testify.<sup>162</sup>

---

157. *Id.*

158. *Id.* at 2.

159. *Id.* at 3 (citing *Text of the World Islamic Front’s Statement Urging Jihad Against Jews and Crusaders*, AL QUDS AL ARABI (London), Feb. 23, 1998).

160. *Id.* at 3 (citing Dr. Abdallah Azzam, *Al-Qa’ida*, AL-JIHAD, Apr. 1988, No. 41, at 46).

161. *Id.* at 1.

162. *See id.* at 1–2 (“Evan Kohlmann has sufficient education, training and knowledge to be qualified as an expert . . . [his] methodology [consists] of gathering

In assessing the reliability of Kohlmann's testimony, Judge Kravitz noted that Kohlmann was "relatively young to be an expert," yet "he applies to his expert testimony the same social science methodologies that he learned at Georgetown University and that are applied to other subjects that cannot be tested scientifically."<sup>163</sup> Judge Kravitz did not identify or describe these methodologies, other than identifying the sources presumably underlying Kohlmann's opinions, and noting that Kohlmann had "acquired a considerable amount of information and documentation on these subjects."<sup>164</sup> In assessing the reliability of his methods, Judge Kravitz described the positive peer review of Kohlmann's work but did not mention any specifics.<sup>165</sup> Judge Kravitz also quoted the opinion of the U.S. District Court for the Southern District of New York in *United States v. Paracha*,<sup>166</sup> in which Judge Stein noted that Kohlmann's work was accepted within the relevant community and that it was employed by experts permitted to testify in other such cases.<sup>167</sup> Relying on Judge Stein's opinion regarding Kohlmann's methodology, Judge Kravitz found Kohlmann's methodology reliable.<sup>168</sup>

Recently, in *United States v. Kassir*,<sup>169</sup> the U.S. District Court for the Southern District of New York again admitted Kohlmann to testify about the origins, history, structure, leadership, and operational methods of al-Qaida.<sup>170</sup> The government charged Kassir with, among other charges,<sup>171</sup> establishing and operating terrorist websites to

---

sources, including a variety of original and secondary sources, cross-checking sources against each other, and subjecting his conclusion to peer review . . ." (citing *United States v. Paracha*, No. 03 CR. 1197(SHS), 2006 WL 12768, at \*20-21 (S.D.N.Y. Jan. 3, 2006), *aff'd*, 313 F. App'x 347 (2d Cir. 2008)).

163. *United States v. Abu-Jihaad*, 553 F. Supp. 2d 121, 125-26 (D. Conn. 2008).

164. *Id.*

165. *See id.* at 126 (noting further that Kohlmann's work "receives a considerable amount of peer review from academic scholars and others, and . . . is well regarded").

166. No. 03 CR. 1197(SHS), 2006 WL 12768 (S.D.N.Y. Jan. 3, 2006), *aff'd*, 313 F. App'x 347 (2d Cir. 2008).

167. *Abu-Jihaad*, 553 F. Supp. 2d at 126 (quoting *Paracha*, 2006 WL 12768, at \*20). In *Paracha*, Judge Stein cited *United States v. Hammoud*, 381 F.3d 316 (4th Cir. 2004), for the notion that "[w]hatever the general pitfalls of the 'vetting process' that is employed by Kohlmann and others in his field, it is a sufficiently reliable methodology to meet the requirements of *Fed. R. Evid. 702*." *Paracha*, 2006 WL 12768, at \*20 (citing *Hammoud*, 381 F.3d at 337).

168. *See Abu-Jihaad*, 553 F. Supp. 2d at 126 (finding, "in its role as gatekeeper," that "Mr. Kohlmann's expected testimony me[t] the requirements of Rule 702").

169. No. S2 04 Cr. 356(JFK), 2009 U.S. Dist. LEXIS 28837 (S.D.N.Y. Apr. 2, 2009).

170. *See id.* at \*1 (denying Kassir's motion to exclude Kohlmann's testimony).

171. *See id.* at \*2 (noting that Kassir was also charged with establishing a jihad training camp in Bly, Oregon).

provide material support to terrorists and al-Qaida.<sup>172</sup> At trial, the government sought to prove that Kassir operated the websites through an organization known as the Islamic Media Center.<sup>173</sup>

Kohlmann's thirty-page expert report<sup>174</sup> follows the same pattern as that described above. He begins with a twenty-page description of al-Qaida's evolution, its leadership (with a focus on Osama Bin Laden), and its tradecraft.<sup>175</sup> Kohlmann then describes the Islamic Media Center as follows:

The "Islamic Media Center" (IMC) is a "second tier" jihadi online support group, dedicated to republishing terrorist propaganda and glorifying the cause of the mujahideen . . . . Over the length of its existence, the IMC has perhaps become most infamous for distributing a massive, highly detailed archive of Arabic-language terrorist training manuals over the Internet . . . . The manuals . . . cover an extremely expansive array of topics—everything from plastic explosives, to sniper tactics, chemical weapons, remote detonators, urban warfare techniques, and car bombs.<sup>176</sup>

Kohlmann goes on to quote several passages from the "Poisons Handbook," and he describes how the IMC "distributed a series of video recordings of sermons given by extreme Salafi clerics known for their support of Al-Qaida."<sup>177</sup> He begins his report by describing his qualifications and by quoting the courts' admissibility decisions in *Paracha* and *Abu-Jihaad*.<sup>178</sup>

In admitting Kohlmann, Judge Keenan relied heavily on the rulings from prior *Daubert* hearings in *Paracha* and *Abu-Jihaad*. In his opinion, Judge Keenan noted that in *Paracha*, the court "found that Kohlmann's reliance in part on secondary sources of information was permissible because other experts in his field reasonably relied on them."<sup>179</sup> Judge Keenan quoted extensively from *Paracha*, noting that

---

172. *See id.* at \*3 (noting that the government charged Kassir with "using the websites in a conspiracy to kill, kidnap, maim, and injure persons in a foreign country," and to "distribute information relating to explosives, destructive devices, and weapons of mass destruction").

173. *Id.* at \*4.

174. EVAN F. KOHLMANN, EXPERT REPORT I: U.S. v. OUSSAMA KASSIR (2009), <http://www.nefafoundation.org/miscellaneous/FeaturedDocs/nefakassirekexpert.pdf>.

175. *See id.* at 2–20.

176. *Id.* at 20–21.

177. *Id.* at 24.

178. *See id.* at 2.

179. *United States v. Kassir*, S2 04 Cr. 356 (JFK), 2009 U.S. Dist. LEXIS 28837, at \*18 (S.D.N.Y. Apr. 2, 2009), *new trial denied*, 2009 U.S. Dist. LEXIS 83075 (S.D.N.Y. Sept. 11, 2009).

other courts had adopted that court's reasoning.<sup>180</sup> The court concluded that "Kohlmann's expertise and reliability have not diminished, and the standard under Rule 702 and *Daubert* remains the same."<sup>181</sup>

*Paracha*, the case relied on by the trial courts in *Abu-Jihaad* and *Kassir*, illustrates the courts' typical review of Kohlmann's methodology. Several courts<sup>182</sup> have relied on Judge Stein's analysis in *Paracha* to support their admissibility decisions.

In *Paracha*, the government prosecuted Uzair Paracha for his role in providing material support to al-Qaida.<sup>183</sup> Specifically, the government alleged that Paracha came to the United States and posed as someone he knew was associated with al-Qaida.<sup>184</sup> To establish its case, the government proffered Kohlmann to testify regarding: "the origins and structure of al Qaeda, its leaders, and its use of cells and individuals to provide logistical support"; "the roles of other alleged al Qaeda members or associates mentioned by Paracha in his statements to law enforcement officials"; and "al Qaeda counter-interrogation techniques."<sup>185</sup>

At the *Daubert* hearing, Kohlmann described his methodology as "gathering multiple sources of information, including original and secondary sources, cross-checking . . . new information against existing information and evaluating new information to determine whether his conclusions remain consonant with the most reliable sources."<sup>186</sup> Defendant Paracha challenged this methodology as

---

180. See *id.* at \*19 (citing *United States v. Paracha*, 313 F. App'x 347 (2d Cir. 2008), *cert. denied*, 129 S. Ct. 1582 (2009); *United States v. Aref*, 285 F. App'x 784 (2d Cir. 2008); *United States v. Abu-Jihaad*, 553 F. Supp. 2d 121 (D. Conn. 2008); *United States v. Sabir*, No. S4 05 Cr. 673 (LAP), 2007 U.S. Dist. LEXIS 34372 (S.D.N.Y. May 10, 2007)).

181. *Id.* Judge Keenan did reserve judgment on whether to admit Kohlmann as an expert in Forensic Computer Testimony. Specifically, Kohlmann sought to testify about the link between the IMC and various email websites purportedly operated by the defendant, and Judge Keenan scheduled a *Daubert* hearing for that issue. *Id.* at \*20.

182. Courts in both *Kassir* and *Abu-Jihaad* relied on Judge Stein's opinion, as did the court in *United States v. Taleb-Jedi*, 566 F. Supp. 2d 157 (E.D.N.Y. 2008).

183. See *United States v. Paracha*, No. 03 CR. 1197(SHS), 2006 WL 12768, at \*6-7 (S.D.N.Y. Jan. 3, 2006) (noting that Paracha was charged in a five count indictment, including violations of 18 U.S.C. § 2339B and regulations issued under the International Emergency Economic Powers Act, 50 U.S.C. § 1705(b)), *aff'd*, 313 F. App'x 347 (2d Cir. 2008).

184. See *id.* Paracha allegedly obtained immigration documents that would permit him to enter the United States, and he accepted up to \$200,000 of al-Qaida funds that he would invest in the business in which he was employed until al-Qaida needed the funds. *Id.*

185. *Id.* at \*18, \*19.

186. *Id.* at \*20.

“a mere culling from a handful of cases and internet reports information that the user deems reliable.”<sup>187</sup> But Judge Stein disagreed, stating that “[w]hatever the pitfalls of this vetting process, and obviously it is not the same peer review as in a formal academic setting, it is . . . sufficiently reliable.”<sup>188</sup>

The court found Kohlmann’s methodology “more reliable than a simple cherry-picking of information from websites and other sources.”<sup>189</sup> According to the court, the hearing demonstrated that Kohlmann’s opinions and conclusions were subjected to various forms of peer review, and that his opinions were generally accepted within the relevant community.<sup>190</sup> Judge Stein noted that the facts and sources underlying Kohlmann’s testimony, “although they do include secondary sources,” were similar to those used by experts in the particular field.<sup>191</sup>

After a full-day hearing on Paracha’s motion in limine to preclude Kohlmann from testifying, the court admitted him as an expert but limited the scope of his testimony to: describing the origins and organization of al-Qaida, identifying its leaders, and explaining its tradecraft.<sup>192</sup> The court allowed him to testify on the origin, structure,

---

187. *Id.*

188. Transcript of Hearing (Nov. 3, 2005) at 10, *Paracha*, 2006 WL 12768 [hereinafter Transcript].

189. *Paracha*, 2006 WL 12768, at \*20.

190. In the transcript, Judge Stein does not mention the “academics and peers in the field” who reviewed Kohlmann’s work; he only notes that “[Kohlmann] explained the process by which his written publications are submitted for comment and critique by academics and peers in his field before publication, and how his postings on the internet, and presentations of public forums, are subject to review by his peers.” Transcript, *supra* note 188, at 10.

191. *Id.* at 9. The court described Kohlmann’s sources as “the 9/11 Commission report, confessions of al Qaeda members, information made available on the Foreign Broadcast Information Service, and original sources from terrorist groups.” *Id.* at 10. Judge Stein described Kohlmann’s methods as similar to those used by a terrorism expert in two prior cases: *United States v. Damrah*, 412 F.3d 618, 625 (6th Cir. 2005), and *United States v. Hammoud*, 381 F.3d 316, 337 (4th Cir. 2004), *vacated and remanded on other grounds* by 543 U.S. 1097 (2005), *reinstated in relevant part* by 405 F.3d 1034 (4th Cir. 2005). *Id.* Matthew Levitt testified as an expert witness in both *Damrah* and *Hammoud*. See *infra* Part II.D (likening Levitt to a “fox” as opposed to a “hedgehog”).

192. Transcript, *supra* note 188, at 12. Judge Stein prohibited Kohlmann from testifying about the two alleged al-Qaida operatives involved in the particular case, finding that his proposed testimony was “too close to a summary of factual evidence from sources that the government cannot introduce directly.” *Id.* at 12–13. The court also prohibited any testimony from Kohlmann on any specific terrorist plots—e.g., 9/11 and the 1993 World Trade Center bombing—because the probative value would be substantially outweighed by the danger of unfair prejudice. There were no allegations in the case that the defendant had any connection to those plots. See *id.* Judge Stein did allow Kohlmann to refer to terrorist plots generically “without specifying individual plots and attacks.” *Id.* As Judge Stein clarified: “[Kohlmann]

and leadership of al-Qaida, analogizing the need for expert testimony in this area to that needed for cases involving organized crime families (in which courts have permitted testimony about the organization and operation of organized crime families).<sup>193</sup> The court excluded his testimony regarding the roles of alleged co-conspirators and regarding al-Qaida's use of counter-interrogation techniques because such testimony would intrude on the jury's function by summarizing factual evidence.<sup>194</sup>

One court initially disallowed Kohlmann's testimony but then admitted it at the time of trial. Initially, in *United States v. Amawi (Amawi I)*,<sup>195</sup> Judge Carr granted the defendants' motion in limine to exclude certain computer evidence obtained from them, not because the court found Kohlmann's testimony unreliable, but because the court found that the testimony's probative value was outweighed by "the risk of very unfair prejudice."<sup>196</sup>

In that case, the government charged the defendants with conspiring to kill and maim U.S. military forces in Iraq and with providing material support to terrorist organizations.<sup>197</sup> The government sought to admit Kohlmann to testify about a series of his reports.<sup>198</sup> The government offered two reports concerning "jihadist"

---

cannot talk about a plot to hijack 12 airlines or a plot to bomb embassies or a plot to bomb the USS Cole. He can talk about terrorist attacks in general." *Id.* at 13.

193. The court cited two mob cases, *United States v. Gotti*, No. S8 02 CR 743 (RCC), 2004 U.S. Dist. LEXIS 21775 (S.D.N.Y. Oct. 29, 2004), and *United States v. Lombardozzi*, No. S1 02 CR. 273 (PKL), 2003 U.S. Dist. LEXIS 6562 (S.D.N.Y. Apr. 17, 2003), as support for its decision to admit Kohlmann. Yet, in both *Gotti* and *Lombardozzi*, the expert's knowledge (the same expert testified in both cases) was experiential; he was a criminal investigator with the United States Attorney's Office testifying based on his thirty-five years of experience investigating organized crime in the area. *Gotti*, 2004 U.S. Dist. LEXIS 21775, at \*3; *Lombardozzi*, 2003 U.S. Dist. LEXIS 6562, at \*5. Also, neither judge in the mob cases even mentioned the reliability of the expert's methodology; the courts' gatekeeping dealt only with relevance—whether the testimony would assist the factfinder. *Gotti*, 2004 U.S. Dist. LEXIS 21775, at \*14–15; *Lombardozzi*, 2003 U.S. Dist. LEXIS 6562, at \*13–14. Therefore, the court's analogy in *Paracha* is not particularly helpful with regard to the reliability of Kohlmann's methodology.

194. See *Paracha*, 2006 WL 12768, at \*31 (noting further that the government cannot present testimony aimed at guiding the jury's determination of the credibility of fact witnesses).

195. 541 F. Supp. 2d 945 (N.D. Ohio 2008).

196. *Id.* at 951.

197. *Id.* at 947. Additional allegations were that "two defendants unlawfully distributed a video showing how to make a suicide bomb vest." *Id.*

198. See *id.* at 948. The government offered five of Kohlmann's reports: two reports discussed video, audio, and written materials seized from the defendants; a third report discussed a document called "39 Ways to Serve and Participate in Jihad"; a fourth report discussed five photographs of Amawi; and a fifth report discussed twenty-two training manuals found in Amawi's possession. *Id.*

materials, including “videos of acts of violence against members of the American armed forces in Iraq.”<sup>199</sup> In addition, the government sought to have Kohlmann testify about the terrorist organizations’ use of the Internet as a tool for recruiting and training terrorists, and general information regarding international terrorism.<sup>200</sup>

Judge Carr identified Kohlmann’s principal occupation as “collection of information—primarily from public sources on the internet—relating to terrorist organizations and activities.”<sup>201</sup> He found that Kohlmann was qualified to testify about the topics described above “on the basis of his research, study, and analysis.”<sup>202</sup> The court nonetheless excluded his testimony on the grounds that the material, even if probative, was highly prejudicial.<sup>203</sup> Judge Carr found certain aspects of Kohlmann’s proposed testimony irrelevant: “Bombs exploding, people being killed, and exhortations to violent jihad speak for themselves, as do the other materials in the government’s presentation.”<sup>204</sup> Ultimately, the court excluded Kohlmann’s proposed testimony under Federal Rules of Evidence 401 and 402.<sup>205</sup> The court explained that “[f]ew terms have a greater inherent risk of prejudice than terrorism, terrorist, jihad, and Al-Qaeda [sic].”<sup>206</sup> The court in *Amawi I* did not address the reliability of Kohlmann’s methodology.

Despite his initial ruling, in a later ruling, Judge Carr allowed Kohlmann to testify, but apparently limited the scope of the testimony.<sup>207</sup> Judge Carr noted that the parties were formulating

---

199. *Id.* (noting that the “jihadist” materials either came from the government’s cooperating witness or were found during post-indictment searches of the defendants’ computers and residences).

200. *Id.* at 952.

201. *Id.* at 947.

202. *See id.* at 949 (identifying specific areas in which Kohlmann is qualified to testify, including such areas as “who has created and creates such materials, how they use the internet to disseminate them[,] . . . the apparent purposes in creating and distributing them and how internet users may be able to locate and access such materials”).

203. *See id.* at 954 (stating that “little . . . could come from Kohlmann’s testimony about the actual or relative comprehensiveness and size of the defendants’ downloaded collection”).

204. *Id.* at 950.

205. *See id.* (finding that Kohlmann’s testimony regarding “the source, nature, and utility of the [computer] materials [was] not relevant”).

206. *Id.* at 951. The court also found the government’s reliance on organized crime cases to be unpersuasive and inapplicable. Judge Carr noted the significant difference: “In such cases, the government is attempting to show the defendant’s connection with and role in the group. That’s not so here, where there is no basis for connecting any of the defendants with a particular group.” *Id.* at 952.

207. *See United States v. Amawi (Amawi II)*, 552 F. Supp. 2d 669, 672 n.2 (N.D. Ohio 2008), *new trial denied*, 2009 U.S. Dist. LEXIS 80988 (N.D. Ohio May 15, 2009).

definitions of various organizations and events relating to the case that would be provided to the jury.<sup>208</sup> He explained that the scope of permissible testimony by Kohlmann would depend on the parties' success at formulating those definitions.<sup>209</sup>

In a recent case out of an Atlanta district court, the trial court described Kohlmann's methodology in greater detail than have other courts in previous decisions (and somewhat differently from how Kohlmann depicts his methodology in expert reports in other cases). Specifically, in *United States v. Ahmed*,<sup>210</sup> Judge Duffey denied the defendants' motion to exclude Kohlmann's testimony, finding Kohlmann's method of "comparative analysis"<sup>211</sup> sufficiently reliable. According to Judge Duffey, Kohlmann divides sources into categories: open (non-classified information from original sources, like interviews), secondary ("original video and audio recordings, books, magazines, and pamphlets written by specific individuals with knowledge of open source information"), and tertiary (newspaper and magazine articles "and other derivative publications").<sup>212</sup> Then, using his methodology of "comparative analysis," Kohlmann "compar[es] and contrast[s] sources against one another to form a cohesive whole."<sup>213</sup>

One common thread in these admissibility decisions is that the courts routinely backtrack to prior admissibility decisions as a means of assessing Kohlmann's reliability. A second common thread is that none of the published opinions, with the exception of Judge Keenan's decision in *Kassir*,<sup>214</sup> demonstrate that the court has probed

---

208. *Id.*

209. *Id.*

210. 2009 WL 1370936 (N.D. Ga. June 1, 2009) (No. 1:06-cr-0147-WSD) (order denying a motion to exclude the expert testimony of Evan Kohlmann).

211. *See id.* at 21 (noting that Kohlmann gathers a variety of information, explains the different value of each piece, and synthesizes the information for his analysis).

212. *Id.* at 10.

213. *Id.* at 21. Although I am not a social scientist, I spent some time researching whether social scientists use a comparative methodology that involves comparing and contrasting sources as the court indicated. *See id.* at 22 (reasoning that the comparative method used by Kohlmann is "identical to those [methods] used by other experts in his field"). I found that social scientists do indeed employ such a methodology. In *The Comparative Method*, Charles C. Ragin depicts the method as one that involves comparing cases, such as historical events (the "case-oriented approach"). CHARLES C. RAGIN, *THE COMPARATIVE METHOD* 34 (1987). As Martha Howell and Walter Prevenier explain in their book, historians certainly do compare sources. *See* MARTHA HOWELL & WALTER PREVENIER, *FROM RELIABLE SOURCES: AN INTRODUCTION TO HISTORICAL METHODS* 69 (2001) (describing how historians use source comparison, as well as other methods, to determine the authenticity of sources and when to dismiss countervailing evidence).

214. *See* *United States v. Kassir*, No. S2 04 Cr. 356(JFK), 2009 U.S. Dist. LEXIS 28837, \*19-21 (S.D.N.Y. Apr. 2, 2009) (considering whether Kohlmann's expertise

into Kohlmann's methodology to ensure that he strives to remain objective (by, for example, carefully and methodically deciding when to dismiss countervailing evidence).<sup>215</sup> While Kohlmann's methodology and conclusions may be sound in the sense that they reflect the same intellectual rigor as others in his field, the published *Daubert* opinions illustrate that courts accept his methodology and conclusions "hook, line, and sinker" without any real scrutiny. This allows Kohlmann to rely primarily on Internet sources without ever having to explain to a court how he assesses the authenticity of those sources.

### C. Hedgehog Bias

Kohlmann certainly presents himself like Berlin's hedgehog—appealing to the media, juries, and judges with his single-minded vision linking individuals to terrorism.<sup>216</sup> Yet, his single-minded cognitive approach may certainly detract from his ability or willingness to recognize contrary evidence or to accept alternate explanations for an individual's behavior.<sup>217</sup> Accordingly, meaningful gatekeeping under *Daubert* becomes crucial to ensure that Kohlmann's methodology is properly tested for reliability.

Kohlmann potentially presents a type of bias that is different from the commonly discussed adversarial bias.<sup>218</sup> The hedgehog's bias does

---

includes Forensic Computer data collection), *new trial denied*, 2009 U.S. Dist. LEXIS 83075 (S.D.N.Y. Sept. 11, 2009).

215. I reviewed court transcripts and Kohlmann's expert reports submitted for admissibility decisions. None of them demonstrate that the courts asked tough questions, though the opinion in *Ahmed*, discussed above *supra* notes 210–213 and accompanying text, reflects that the court at least ascertained, in some detail, Kohlmann's methods.

216. As courts continue to admit Kohlmann, with judges commending his methods and qualifications, some commentators paint a different picture. According to some, Kohlmann's knowledge of terrorism is limited, but his propaganda and his ability to scare jurors about terrorists are bountiful. *See, e.g.*, CRITICAL TERRORISM STUDIES: A NEW RESEARCH AGENDA 27 (Marie Breen Smyth, Jeroen Gunning, & Richard Jackson eds., 2009) ("Kohlmann skillfully mastered the 'art of court diving,' volunteering to become an expert witness for the prosecution where he gains access to all discovery material, which in turn, through snowballing is reused in his analysis elsewhere."); Mills, *supra* note 134 (describing Kohlmann's methods as "scaremongering and blatant amateurism").

217. This cognitive style does not have the same self-checking mechanisms as the fox's style, which is known for its self-doubts and self-reflection. *See* Gould, *supra* note 5, at 5.

218. *See* David Bernstein, *Expert Witnesses, Adversarial Bias, and the (Partial) Failure of the Daubert Revolution*, 93 IOWA L. REV. 451, 456 (2008) (describing different types of adversarial bias, including "selection bias," which means that the expert "will represent the perspective the attorney wants to present at trial"). Here, I am not referring to the ordinary biases that every person possesses, or even to "adversarial

not develop because one side has chosen and paid for the expert (thus motivating the expert to testify for that party);<sup>219</sup> rather, the bias develops from the expert's self-selection of the only side of the lawsuit on which she would ever testify. I suspect that a hedgehog-type expert, like Kohlmann, would never switch sides and offer testimony on the background of terrorist organizations and recruiting methods for an alleged terrorist because his life's work is tracking terrorists.<sup>220</sup>

I use "hedgehog bias" to mean unfaltering devotion to that one, big, central idea that informs all of the hedgehog's other ideas. Presumably, the hedgehog is so enamored with her one big idea that she instinctively dismisses all contrary, opposing points related to that idea. The expert reshapes the data, sources, and facts to align with her one big idea.<sup>221</sup> Thus, this bias impacts not only the expert's conclusions, but also how she processes the evidence to reach the conclusion; it becomes part of her methodology. This type of bias is presumably much more difficult for trial courts to discern (and even for a skillful cross-examiner to discern) than bias that impacts only an expert's conclusions.

This is not about an expert's personality.<sup>222</sup> Rather, this is about a cognitive approach that impacts an expert's methods.<sup>223</sup> Accordingly, what is currently accepted—that juries (and presumably judges) are drawn to charismatic personalities<sup>224</sup>—should be amended to include the idea that an expert's single-minded cognitive approach may make the expert come across as more trustworthy because she has neatly

---

biases"; rather, I am referring to a bias that results from a longstanding devotion to a single idea that predates litigation. Such bias informs all the expert's related ideas.

219. See Jennifer L. Mnookin, *Expert Evidence, Partisanship, and Epistemic Competence*, 73 BROOK. L. REV. 1009, 1013 (2008) (suggesting that a party selects a particular expert to testify because the party expects that the jury will find that expert most believable).

220. See Strauss, *supra* note 109 (implying that Kohlmann had a specific motive to pursue his research on terrorists after 9/11).

221. Here, I rely on the work of Professor Dan Simon and Professor Tobin Sparling for comparison. As discussed in more detail below, Simon describes how, in the judge's mind, "[t]he factual patterns, the authoritative texts, and the resulting propositions are *restructured*." Dan Simon, *A Psychological Model of Judicial Decision Making*, 30 RUTGERS L.J. 1, 20 (1998); see also Sparling, *supra* note 18.

222. Other commentators have written on experts being charismatic, and thus appealing to courts and juries. See, e.g., Margaret A. Berger & Lawrence M. Solan, *The Uneasy Relationship Between Science and Law: An Essay and Introduction*, 73 BROOK. L. REV. 847, 853 (2009).

223. In a sense, it becomes the expert's methodology because it seems impossible to separate cognitive approach from methodology.

224. See Mnookin, *supra* note 219, at 1013 (noting that judges and juries tend to believe experts they find impressive, not necessarily because they understand the science).

aligned all the data in her mind, possibly discarding countervailing evidence.

Courts probably like hedgehog-type experts for the same reasons that juries, the media, and lawyers do.<sup>225</sup> She presents herself with confidence and charisma, and she explains her opinions with clarity and certainty.<sup>226</sup> The hedgehog-type expert does not express self-doubt or uncertainty; accordingly, judges favor her. Commentators have described the irony of the legal system's disdain for "uncertainty" with regard to scientific experts: "The legal system is far more welcoming of dueling experts who reach opposite conclusions than it is of consensus without certainty."<sup>227</sup> Because of these attributes, the hedgehog-type expert actually fits much better within the typical model of judicial decision-making.

In a sense, hedgehog bias resembles that which Professor Dan Simon describes as the judiciary's "coherence bias."<sup>228</sup> Judges aspire to make decisions with certainty. When a judge is confronted with a hard, complex case, the judge mentally "restructure[s]" the arguments so that the judge dismisses all the points related to the less favored position to arrive at a single, certain, favored position.<sup>229</sup> Professor Simon describes this shift toward closure as follows:

---

225. *See id.* This phenomenon is comparable to the outcome of the "Dr. Fox study," in which an actor portrayed a preeminent scholar who gave a lecture entitled "Mathematical Game Theory as Applied to Physician Education" to a group of psychiatrists, educators, graduate students, and other professionals. Deborah J. Merritt, *Bias, the Brain, and Student Evaluations of Teaching*, 82 ST. JOHN'S L. REV. 235, 242 (2008). Dr. Fox's lecture was essentially nonsense, but the audience praised it because of Dr. Fox's style, presentation, and analysis. *Id.*

226. *See* Francis E. McGovern, *Toward a Functional Approach for Managing Complex Litigation*, 53 U. CHI. L. REV. 440, 474 (1986) (relying on studies of cognitive styles in which judges tend to seek "right" or "wrong" answers, as opposed to scientists who "concentrate more on underlying concepts and gradations in correctness").

227. Berger & Solan, *supra* note 222, at 852. The legal system's preference for experts who express their opinions with certainty also applies in the scientific arena. *Id.* In their book about the legal system's "idealization of science," Professors Caudill and LaRue explain why judges, at times, mistakenly admit bad scientists and exclude good ones:

Science is thus not characterized by its objectivity and certainty—and conclusions are seen as often tentative, contradictory, or probabilistic. . . . This does not signal unreliability, but rather marks the typical conditions under which natural *and* social scientists work to produce useful knowledge. . . . [T]he reason why those judges did not recognize the practical goals and limitations of science . . . was their idealized image of the features of the scientific enterprise.

CAUDILL & LARUE, *supra* note 14, at 23–24.

228. *See* Simon, *supra* note 221, at 21 (explaining that judicial reasoning is different from typical legal reasoning because, unlike lawyers, the judge has to make a final decision).

229. *See* Sparling, *supra* note 18.

[T]he judge's mental representation of the dispute evolves naturally towards a state of coherence. That is, the cognitive system *imposes coherence* on the arguments so that the subset of arguments that supports one outcome becomes more appealing to the judge and the opposite subset, including arguments that previously seemed appropriate, turns less favorable.<sup>230</sup>

Simon illustrates in his research how the coherence model actually results in decisions based on skewed mental models: "Due to these *coherence shifts*, at the culmination of the process, the decision-maker's mental model is skewed toward conformity with the emerging decision. As the hard case morphs into an easy one, the decision follows easily and confidently."<sup>231</sup> Judge Richard Posner described judicial opinions as being "couched in a 'vocabulary of apodictic certainty.'"<sup>232</sup> Thus, the judicial decision-making process impels the judge toward certainty, which the hedgehog-type expert provides.

#### D. Matthew Levitt—A Likely Fox

Though I chose to focus on the hedgehog-type expert because of its awkward interplay with *Daubert* gatekeeping, the fox-type cognitive approach also underscores flaws in *Daubert*. At times, the government proffers two other experts to testify in criminal cases against alleged terrorists, though with much less frequency than the government proffers Kohlmann.<sup>233</sup> One of these experts, Matthew Levitt, is a senior fellow and director of the Washington Institute's Stein Program on Terrorism, Intelligence, and Policy.<sup>234</sup> Based on only a limited review, Levitt seems more fox-like. Levitt's background is academic and varied, with a master's degree in law and diplomacy and a doctorate from *Tufts' Fletcher School of Law and Diplomacy*.<sup>235</sup> Levitt has worked for the U.S. Department of the Treasury and the Federal Bureau of Investigation (FBI), where he focused on studying

230. Simon, *supra* note 221, at 20.

231. Dan Simon, *A Third View of the Black Box: Cognitive Coherence in Legal Decision Making*, 71 U. CHI. L. REV. 511, 517 (2004).

232. Richard A. Posner, *THE PROBLEMS OF JURISPRUDENCE* 30 (1990).

233. The government has proffered expert witnesses Dr. Richard Tanter and Matthew Levitt in these cases. *See, e.g.*, *United States v. Batiste*, No. 06-20373-CR, 2007 WL 5303052, at \*1-6 (S.D. Fla. Oct. 26, 2007) (offering Dr. Richard Tanter as the government's expert witness to provide information regarding the stages of the "radicalization process"); *United States v. Holy Land Found. For Relief and Dev.*, No. 3:04-CR-240-G, 2007 WL 2059722, at \*7-10 (N.D. Tex. July 16, 2007) (offering Matthew Levitt as the government's expert witness to teach the jury about Hamas).

234. *See* Expert Biography for Matthew Levitt, The Washington Institute for Near East Policy, <http://www.washingtoninstitute.org/templateC10.php?CID=5> (last visited on Feb. 3, 2010).

235. *Id.*

fundraising and logistical support methods of terrorist groups in the Middle East.<sup>236</sup> He has studied negotiation, and he lists terrorism and the Arab-Israeli peace process as areas of expertise.<sup>237</sup>

During a roundtable discussion on counterterrorism assistance programs, Levitt began his remarks by stating, “I don’t claim to be an expert on the issue of capacity building or training assistance per say . . . .”<sup>238</sup> In addition, many of his PolicyWatch/PeachWatch articles are titled as questions: for example, “Gaza: The Next Terrorist Safe Haven?”<sup>239</sup> and “Iran Sanctions: Can They Be Effective?”<sup>240</sup> Thus, even with his language, Levitt presents himself as more open-minded and receptive to the possible merit of opposing views. In one of the cases in which the government proffered Levitt, *United States v. Holy Land Foundation for Relief and Development*,<sup>241</sup> the court excluded his testimony because the government had not established the reliability of Levitt’s methodology.<sup>242</sup> Specifically, the defendants had “dissect[ed]” the authorities in Levitt’s book (on which he was going to rely) and attempted to demonstrate that Levitt’s methodology did not satisfy the intellectual rigor standard.<sup>243</sup>

Although Levitt has strong qualifications in terms of social science methodology, presumably, when testifying, he would be prone to describing the ambiguities relating to his theories or conclusions. Perhaps he would treat testifying more like classroom teaching, where professors probe the uncertainties, thus making him less attractive to courts and juries. In a sense, how courts treat experts with more fox-like characteristics may be similar to what Caudill and LaRue describe as courts’ “idealization” of scientific testimony—the expectation that good science will always yield results with a high

---

236. *Id.*

237. *Id.*; see also MATTHEW LEVITT, NEGOTIATING UNDER FIRE: PRESERVING PEACE TALKS IN THE FACE OF TERROR ATTACKS (2008).

238. Transcript of Remarks of Matthew Levitt, Reforming U.S. Counterterrorism Assistance Programs, <http://www.washingtoninstitute.org/print.php?template=C07&CID=452> (last visited Feb. 3, 2010).

239. See Matthew Levitt, *Gaza: The Next Terrorist Safe Haven?*, POLICYWATCH/PEACEWATCH, June 29, 2007, <http://www.washingtoninstitute.org/templateC05.php?CID=2631>.

240. See Matthew Levitt, *Iran Sanctions: Can They Be Effective?*, POLICYWATCH/PEACEWATCH, Oct. 25, 2007, <http://www.washingtoninstitute.org/templateC05.php?CID=2673>.

241. No. 3:04-CR-240-G, 2007 WL 2059722 (N.D. Tex. July 16, 2007).

242. See *id.* at \*8–9 (explaining that the court was not completely convinced by the defense’s challenges to Levitt, but holding that the government had to provide more than “unsubstantiated and unverified assertion[s]” to prove reliability).

243. See *id.* at \*8 (noting that the defendants used the declaration of Professor Charles D. Smith to depict the shortcomings in Levitt’s methodology).

degree of certainty.<sup>244</sup> Ultimately, regardless of whether an expert is more fox- or hedgehog-like, the gatekeeping system needs to be rejuvenated to account for the differences in how experts process information.

### III. PROPOSAL: REJUVENATE *DAUBERT* TO INCLUDE CONSIDERATION OF AN EXPERT'S COGNITIVE APPROACH

The goal of *Daubert* gatekeeping is clear:

It is to make certain that an expert, whether basing testimony upon professional studies or personal experience, employs in the courtroom the same level of intellectual rigor that characterizes the practice of an expert in the relevant field.<sup>245</sup>

Thus, in assessing an expert's methodology, the court should consider an expert's intellectual approach—not only *what* an expert thinks, but *how* an expert thinks. This would require courts to shift some longstanding presumptions. For instance, on remand in *Daubert v. Merrell Dow Pharmaceuticals, Inc. (Daubert II)*,<sup>246</sup> Judge Kozinski stated that when an expert testifies based on research he conducted before litigation, this “provides important, objective proof that the research comports with the dictates of good science.”<sup>247</sup> However, as shown herein, a lifetime of research in a particular area may also signify a tendency toward devotion to an idea that taints the expert's analysis.

I do not recommend a major overhaul of *Daubert* but rather a revitalization of the test to include certain presumptions (and to eliminate certain previously held assumptions) and thereby ensure that courts scrutinize methodology.

A revised and rejuvenated gatekeeping scheme would assist courts in recognizing experts with hedgehog-type approaches, if, for instance, the expert satisfies these criteria: (1) the expert always testifies for the same side (or party) to a lawsuit in the same *type* of lawsuit; (2) the expert has worked (outside of testifying) for the entity on behalf of which she is testifying; (3) the expert has provided expertise on the subject outside of court (e.g., in the media); (4) the expert has spent considerable time studying/exploring the set of ideas prior to litigation; and (5) the expert leaves no room for doubt

---

244. CAUDILL & LARUE, *supra* note 14.

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

246. 43 F.3d 1311 (9th Cir. 1995).

247. *Id.* at 1317. Judge Kozinski went on to say that “experts whose findings flow from existing research are less likely to have been biased toward a particular conclusion by the promise of remuneration.” *Id.*

---

---

(she expresses her opinions with an unfaltering sense of certainty). This would turn the presumptions currently underlying *Daubert* gatekeeping upside-down, as characteristics that previously supported reliability of methodology would now be considered reasons to closely scrutinize the expert's methods.

If the expert meets these criteria, the court should investigate the expert's methodology to determine whether the expert is capable of being even-handed with the evidence. For example, as a trial judge, I would ask the following "tough" questions of an expert like Kohlmann:

1. What, very specifically, is Kohlmann's peer community? Is it (a) those who track al-Qaida and its connection to Azzam Publications on the Internet, (b) political scientists who study international affairs and who specialize in terrorist organizations, or (c) those who use Internet sources to track any type of organization because the expertise actually involves the proper collection of Internet sources?

2. Has Kohlmann published in "academic" journals alongside political scientists who study international affairs, and what is the reputation among peers of the blogs on which he frequently posts?

3. Should the court's inquiry probe into Kohlmann's use of Internet sources and his expertise in deciding the authenticity of these sources, what methods does Kohlmann use to authenticate his Internet sources?<sup>248</sup> And the follow-up question: What does the community of "Internet researchers"—those who study and teach how to authenticate Internet sources—think of his methods?

4. How does Kohlmann prioritize Internet sources in terms of authenticity?

5. How does Kohlmann handle contrary evidence, for example, evidence supporting the notion that Azzam Publications has other primary functions, aside from recruiting terrorists, and that a particular defendant has been engaged in this other function?

6. How have terrorist groups' use of the Internet changed since 9/11, and how has Kohlmann reacted to this change?

---

248. This suggests an entirely different type of expertise—an Internet source expert rather than simply an expert on terrorist organizations.

Presently, courts do not ask these questions.

This proposal requires more than courts acknowledging differences among *types* of potential experts and using those differences to determine the proper gatekeeping test and degree of scrutiny. Courts presently distinguish between scientific and nonscientific experts and then, within *nonscientific* expertise, courts differentiate technical and experiential experts from academic experts (notably, Kohlmann is not any of the above; he is self-made based on studying a particular subject).<sup>249</sup> Courts should acknowledge these differences because they relate to peer community. The cognitive style of the expert—whether scientific or nonscientific—is a more telling indicator of reliability of methodology (and a reason to apply stricter or softer scrutiny) than is the type of expert.

If investigating different methodologies is overly cumbersome, special masters could be appointed to research and advise courts on how to assess the methodology of a particular type of expert. Pursuant to Federal Rule of Civil Procedure 53, a judge may appoint a special master to recommend findings of fact in certain circumstances.<sup>250</sup> The master could check the expert's description of methodology to see whether it matches the "intellectual rigor" expected in the field. Courts could obtain these masters from professional organizations or academic institutions. Although it would increase court costs (in terms of paying the master),<sup>251</sup> it would shorten the *Daubert* hearing and lessen the time the judge must take

---

249. See Victoria E. Briant & William N. Hebert, *Soft Science and the Courts After Daubert: Non-Scientific Expert Testimony*, SF78 ALI-ABA 111 (2001) (discussing how soft-science experts are evaluated under *Daubert*, listing nonscientific or technical disciplines as: "medical/mental health, engineering, accident reconstruction, police procedures, fire/arson, economics, accounting, patents and trademarks, law, appraisal, insurance, and securities"). The article did not include such disciplines as political science, linguistics, or history. *Id.*

250. Rule 53(a)(1)(B)(i) permits judges to appoint a master to recommend findings of fact on issues for the court to decide if "warranted by . . . some exceptional condition." The rule also provides for the appointment of a master to perform an accounting or to "resolve a difficult computation of damages." FED. R. CIV. P. 53(a)(1)(B)(ii). In *Joiner*, Justice Breyer suggested the use of special masters to assist courts in understanding specialized knowledge pursuant to Federal Rule of Evidence 706. *Gen. Elec. Co. v. Joiner*, 522 U.S. 136, 149–50 (1997) (Breyer, J., concurring).

251. FED. R. CIV. P. 53(h).

to research the methodology.<sup>252</sup> Accordingly, the overall process would make the hearing more efficient and effective.

Thus, a rejuvenated *Daubert* test would involve a different set of presumptions from those that currently exist. Primarily, judges would focus on methodology, keeping that assessment separate from qualifications. A judge would not assume that because an expert is wholeheartedly devoted to a set of ideas, the judge should be equally smitten by those ideas. Comparatively, though not the subject of this Article, the fox-type expert should not provoke typical presumptive responses from trial courts. Because the fox-like expert expresses a lack of certainty and even some self-doubt, the court should not infer that the expert's methodology is untrustworthy.<sup>253</sup>

A. *Courts Should Determine and Apply the Most Fitting Set of Factors, Given the Type of Expertise*

Until the use of special masters takes hold, courts can themselves determine and apply factors that fit the type of expertise. Judge Irenas of the U.S. District Court for the District of New Jersey attempted this in *Milanowicz v. Raymond Corp.*,<sup>254</sup> a products liability action involving injuries caused by a forklift.<sup>255</sup> Judge Irenas crafted a particular gatekeeping test for the plaintiff's engineering expert—a "reconfigured" *Daubert* analysis fitting for an engineer.<sup>256</sup> Judge Irenas included the following factors in his test: (1) federal design and performance standards; (2) independent standards organizations; (3) relevant literature; (4) industry practice; (5) product design and accident history; (6) charts and diagrams; (7) scientific testing; (8) feasibility of suggested modifications, and (9) risk-utility of suggested modification.<sup>257</sup> Using these factors, Judge Irenas held that the testimony of the expert lacked reliability, as the expert, for

---

252. See Margaret G. Farrell, *Special Masters in the Federal Courts Under Revised Rule 53: Designer Roles*, SM051 ALI-ABA 1 (2007) (suggesting that the use of a special master in a *Daubert* hearing would provide a decision-maker who knew the area of science and would save time and money).

253. See CAUDILL & LARUE, *supra* note 14.

254. 148 F. Supp. 2d 525 (D.N.J. 2001).

255. See *id.* at 540 (holding that an expert witness's testimony was inadmissible because the engineer consultant lacked "indicia of reliability").

256. *Id.* at 532.

257. *Id.* at 533–36. Judge Irenas "culled" the factors from a nationwide search of cases, mostly involving products liability. *Id.* at 532.

example, “identified nothing in the literature which would suggest peer review of his conclusions.”<sup>258</sup>

Some commentators opine that no matter what test is applied, the effectiveness of *Daubert* may not change. Edward Cheng argues for independent judicial research because of flaws in *Daubert* gatekeeping.<sup>259</sup> Specifically, he argues that, regardless of the factors of the test, judges will continue to apply “some general level of scrutiny to scientific evidence,” which often misapplies the *Daubert* factors.<sup>260</sup> As Cheng’s article suggests, the degree of scrutiny and proper application of the test is as important as the particular factors of the test.<sup>261</sup> But given a fitting set of factors *and* an appropriate degree of rigor, the court could simply test the logic of an expert’s testimony against the expert’s stated methodology. As one commentator aptly noted, courts should be able to judge the reliability of methodology and conclusions if such methodology is described well:

[T]he judiciary’s expertise is in deconstructing an argument: assessing the logic of the argument, the validity of its premises, the rigor with which the witness applied the technique, the faithfulness of the witness’s application of the methodology to her description of it, the magnitude of the inference drawn by the witness in forming her opinion, and the sufficiency of the facts to support the inference.<sup>262</sup>

The court should, with a proper set of factors, be able to distinguish the expert whose big idea is not supported by a reliable

---

258. *Id.* at 538. Judge Irenas’s attempt to craft a suitable standard for the engineering expert’s methodology, rather than simply rubber-stamping or excluding the expert because of her atypical expertise, is commendable.

259. Edward K. Cheng, *Independent Judicial Research in the Daubert Age*, 56 DUKE L.J. 1263, 1268 (2007) (arguing that such research should be required when judges face new and difficult scientific issues).

260. Cheng illustrates the courts’ “patent distortion and misunderstanding” of certain *Daubert* factors through his discussion of *United States v. Havvard*, 260 F.3d 597 (7th Cir. 2001), in which the Seventh Circuit approved the lower court’s admission of a fingerprinting expert because the techniques had been tested in an adversarial setting and each result is verified by peer review, and *United States v. Llera Plaza*, No. CR. 98-362-10, 2002 WL 27305, at \*10–11 (E.D. Pa. Jan. 7, 2002), in which the court rejected *Havvard*’s inaccurate description of fingerprinting. Cheng, *supra* note 259, at 1270.

261. Cheng, *supra* note 259, at 1268.

262. See *Reliable Evaluation of Expert Testimony*, *supra* note 29, at 2148 (distilling the court’s gatekeeping role from several cases). Trial courts describe their quest as ensuring the logic of the step from evidence to conclusion. See, e.g., *Franklin v. Sheet Metal Workers Int’l Ass’n*, No. 06-0004-CV-W-GAF, 2008 U.S. Dist. LEXIS 74742, at \*16 (W.D. Mo. 2008) (excluding an expert because of his failure to provide “a logical course of evidence to support his speculative conclusion”).

---

---

methodology from the expert who used a methodology similar to that used by her peers outside of litigation.

Ultimately, courts should develop a suitable set of factors to test a particular social science methodology. Courts should rely on available resources like professional organizations to assist in developing a standard.<sup>263</sup> As described by Judge Brown, the standard for reliability falls into three categories: methodological, foundational, and connective.<sup>264</sup> For each of these categories, I present factors courts should use to assess trustworthiness; I also present three factors (referred to as “bias indicators”) specifically aimed at highlighting an expert’s potential bias.

1. *Methodological*

a. *Response of peer review community*

First, the court should identify the expert’s peer community. The court can then assess whether the methodology and ultimate conclusion or theory has been peer reviewed (and the result of such review). The expert should provide both criticism and praise—any commentary on the expert’s methodology should be offered. If the peer review is written, the court should also consider how the journal is used and how it is regarded in the peer community. Obviously, the peer community should be the same one in which the expert works outside of litigation.

b. *Dispassionate allegiance to professional standards*

In the social science community, certain fields have professional organizations with standards. The American Political Science Association, for example, may be able to provide standards for a particular analysis. Courts should review these standards in deciding whether the expert followed the proper methodology.

2. *Foundational reliability*

a. *Method of selecting/verifying supporting evidence and documents*

This factor has two aspects: how the expert selects which sources to rely on, and how the expert verifies the authenticity of those sources.

---

263. For example, the American Political Science Association provides many resources and conferences, including resources on methodology. American Political Science Association Home Page, <http://www.apsanet.org> (last visited Feb. 3, 2010).

264. See Brown, *supra* note 51, at 749.

This becomes particularly important when the expert's sources come largely from the Internet.

*b. Treatment of contrary evidence or methodology*

Because so much of social science (political science, history,<sup>265</sup> and anthropology) is based on document selection and interpretation, courts should focus on this factor in assessing a social science expert's methodology.<sup>266</sup> Experts should be required to describe and identify sources contrary to their opinions and explain why they rejected those sources. This factor takes on even greater importance when the expert displays hedgehog-type characteristics.

*c. Whether the field of expertise is "known to reach reliable results" for the type of opinion the expert offers in court<sup>267</sup>*

This factor sounds like the categorical review described above. This Article does not directly address the merits of this type of review; however, I certainly reject the notion that a court should admit an expert in one case because another judge in a different case held that her testimony was admissible. I also reject the notion that courts should assess the reliability of a type of expertise (e.g., fingerprinting analysis) and that such action fulfills their gatekeeping obligation.

---

265. In her note concerning the libel case brought by David Irving against Professor Deborah Lipstadt, Wendie Schneider extracts from the judge's opinion a standard for historian expert-testimony. Wendie Ellen Schneider, Note, *Past Imperfect*, 110 YALE L.J. 1531, 1535 (2001). Many of these factors are useful for social science testimony generally. Schneider extracts the following rules from Judge Gray's opinion: (1) "treat sources with appropriate reservations;" (2) refrain from dismissing countervailing evidence without proper consideration; (3) be even-handed and avoid "cherry-picking" the evidence; (4) indicate when speculating; (5) refrain from "mistranslat[ing]" or "omitting" sections of documents; (6) "weigh the authenticity of all accounts, not merely those that contradict her favored view;" and (7) consider the "motives of historical actors." *Id.* (citing *Irving v. Penguin Books Ltd.*, 2000 WL 362478 (Q.B. Div. Apr. 11, 2000)). For each rule, Schneider cites parts of Judge Gray's opinion in which he criticizes Irving for his one-sided approach to his historical scholarship. *Id.* at 1535 nn.22-28. She describes the benefits of this standard as follows:

It would discourage dismissal of evidence based simply on the historian's holding convictions about his or her subject matter; it would give judges a more nuanced understanding of what historians should and should not be expected to testify to on the stand; and it would combat the tendency of historians on either side of a case to present unduly one-sided conclusions.

*Id.* at 1540.

266. See FED. R. EVID. 702 advisory committee's notes (providing a similar, though different, test: "Whether the expert has adequately accounted for obvious alternative explanations").

267. See *J & V Dev., Inc. v. Athens-Clarke County*, 387 F. Supp. 2d 1214, 1226 (M.D. Ga. 2005) (providing an example for the application of this factor).

---

---

### 3. *Connective*

#### a. *Ipse dixit*

The court should assess whether the expert has unjustifiably extrapolated from an accepted premise to an unfounded conclusion—the *ipse dixit* problem of *General Electric Co. v. Joiner*.<sup>268</sup> The court can simply decide whether the conclusion makes sense, given the methodological steps.

### 4. *Bias indicators*

#### a. *Context in which expert developed methodology/theory*

Under this factor, the court should assess whether the theory, interpretation, or methodology has been employed in a non-trial (academic, for example) setting.<sup>269</sup> Again this factor may now cut the other way (suggesting a need to further scrutinize the methodology) if the expert has made her life's work of pursuing the ideas about which she plans to testify.

#### b. *Overcoming bias*

If the expert's characteristics suggest a hedgehog-like devotion toward a particular idea, the court should determine what steps the expert has taken to ensure that the devotion did not skew her methodology or conclusions.

#### c. *Subjective interpretation*

If the theory clearly calls for a subjective interpretation (e.g., of the meaning of a document), the court should acknowledge this and adequately scrutinize the expert's methodology to ensure that she took steps to check (and double check) her objectivity in arriving at her conclusions.<sup>270</sup>

---

268. 522 U.S. 136 (1997).

269. On remand, the Ninth Circuit in *Daubert* added this factor to the list: whether the expert's opinion was developed independent of the litigation or strictly for purposes of testifying. *Daubert v. Merrell Dow Pharms., Inc. (Daubert II)*, 43 F.3d 1311, 1317 (9th Cir. 1995); see also *In re Paoli R.R. Yard PCB Litig.*, 35 F.3d 717, 743 (3d Cir. 1994) (suggesting that an expert's testimony is only admissible if the research was conducted for purposes of the trial).

270. See *Daubert II*, 43 F.3d at 1311.

*B. At the Same Time, Courts Should Enforce Procedural Reforms to Ensure Accountability and Transparency*

In addition to the proposals described above, appellate courts should require greater accountability and transparency from trial courts. In *No Magic Wand*, Professors Caudill and LaRue describe how appellate decision-making about scientific experts reflected a more realistic approach to science than did trial courts' admissibility decisions.<sup>271</sup> Thus, the appellate courts reversed decisions in which trial courts expected nothing less than certainty from scientific experts.<sup>272</sup> This appellate review serves as a check on a trial court's idealistic (and, according to the authors, unrealistic) view of science.

This check requires trial courts to make detailed findings (transparency) concerning each aspect of expert admissibility (accountability).<sup>273</sup> These findings would include a description of the various factors the court used to test reliability and the specific reasons for the court's decision regarding reliability of methodology. Thus, the appellate standard would remain abuse of discretion,<sup>274</sup> but the discretion would require adherence to certain requirements, like making the findings described herein.

Finally, trial courts should also adhere to the proponent's burden of establishing admissibility, rather than setting a very low threshold and then requiring the other side to establish the unreliability of the expert testimony.

#### CONCLUSION

Much has been written on the merits and shortcomings of *Daubert* and about experts and bias, particularly adversarial bias stemming from remunerating experts and the parties' zeal to win. Yet, little exists (either with regard to trial practice or in a more theoretical sense) about whether certain traits of experts tend to diminish the efficacy of *Daubert*. In other words, perhaps we need to ponder not only what is wrong with *Daubert* as a gatekeeping test and what courts can do about it, but also how experts' cognitive approaches impact courts' ability to assess methodology under *Daubert*.

---

271. CAUDILL & LARUE, *supra* note 14, at 20–23.

272. *Id.*

273. See *Reliable Evaluation of Expert Testimony*, *supra* note 29, at 2150 (stating that judges can take reliability determinations from the jury as long as judicial rulings have “greater transparency and accountability”).

274. See Saks, *supra* note 104, at 234–35 (arguing that scientific rulings should receive de novo review).

Courts routinely admit Evan Kohlmann to testify as an expert witness in very high-profile criminal cases against alleged terrorists. Courts do so because Kohlmann presents himself as the “gold standard” for counterterrorism expertise. During his career, Kohlmann has made it his life’s work to follow terrorist organizations and gather data. In his reports, Kohlmann links whatever organization or website is at issue in the case (because of the defendant’s alleged ties to that entity) to al-Qaida, Osama Bin Laden, and terrorism generally; he does so with unfaltering conviction, powerful language and imagery, and no room for doubt. As a result, courts, attracted to Kohlmann’s certainty, admit him to testify about these issues.

The missing piece in this seemingly perfect equation is a *real* inquiry by courts into Kohlmann’s methodology. In only one opinion does the court actually describe his methodology by name; otherwise, courts merely accept Kohlmann’s description of his method. In accepting Kohlmann’s method, courts lean heavily on the fact that he has been engaged in this process since he was in law school and that other courts have accepted his methodology. When viewed through the lens of the fox/hedgehog dichotomy, courts’ current gatekeeping of a hedgehog-type expert’s methodology is shown to have little substance and a great need for repair.