

THE IMPLICATIONS OF *G.E. v. JOINER* FOR ADMISSIBILITY OF EXPERT TESTIMONY

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THE DECISION

*General Electric v. Joiner*¹ represents a curious development in the law relating to admissibility of expert testimony. The case arises from the exposure of Robert K. Joiner to PCBs during his work for the City of Thomasville, Georgia and his subsequent diagnosis of small cell lung cancer. His expert witnesses on causation testified that the exposure to PCBs included exposure to dioxins and furans, byproducts of PCBs, and that the combined exposure to all three of these toxins was a substantial contributing factor to his small cell lung cancer. The District Court granted summary judgment for the defendants on the issue of whether Joiner was exposed to dioxins and furans and further held that since the testimony of Joiner's experts was limited by the Court to asserting that PCBs alone contributed to his small cell lung cancer, such testimony was inadmissible. The principal bases for the latter ruling were that the experts failed to explain how the animal and human studies upon which they relied supported the conclusion that PCBs alone contributed to the cancer. The Court of Appeals for the 11th Circuit reversed, holding that in conducting an abuse of discretion review of the decision of the District Court, it should give a hard look to the decision of the District Court where the effect of the decision is to grant summary judgment against the party whose experts have been excluded. The Court found that the District Court had intruded on the province of the jury by actually weighing the evidence of the experts and deciding whether it was convincing to the District Court. The 11th Circuit also held that the District Court erred in granting summary judgment on the issue of exposure to furans and dioxins. Defendants sought certiorari on the sole issue of the proper standard of review. The Supreme Court granted certiorari on that issue.

1. 139 L.Ed. 2d 508 (1997).

At this point it appeared that the Supreme Court was only going to decide the question of the proper standard of review of an evidentiary ruling excluding expert testimony where the effect would be a grant of summary judgment. However, all the parties to the case and interested fellow-travelers from both sides saw that the case could serve as a vehicle for the Supreme Court to expand on its *Daubert v. Merrell Dow* decision and give additional guidance to courts on just how far a Court should go in deciding on the admissibility of expert opinion. Defendants and their amici argued that the District Court was correct in finding inadmissible testimony that relied on the use of epidemiologic studies which did not exclusively implicate PCBs or did not find elevated small cell lung cancer rates after PCB exposures and that relied on nonhuman animal studies (mice) who were given much larger doses by different exposure routes. Plaintiffs and their amici argued that such points of contention went to weight, and not admissibility, and therefore were issues for the jury and not the Court.

The Supreme Court agreed with defendants on the issue of the standard of review holding that the ruling on admissibility of expert opinion, like a ruling on any other issue of admissibility of evidence, was left to the discretion of the District Court and subject to reversal only for an abuse of that discretion. No heightened scrutiny is warranted even if the effect of the denial of admissibility is to grant summary judgment. The Supreme Court then ducked the issue of most interest - what kind of an inquiry should be undertaken - and focused instead on the requirement in *Daubert* that an expert opinion must not only follow a scientific methodology but must include scientific reasoning. In *Joiner*, once plaintiff's experts presented their views and the bases for those views, although the defendant's experts attacked them, the plaintiff's experts provided no additional reasons to support their conclusions. This left the Supreme Court able to conclude, with respect to reliance on animal studies, that "[r]espondent [*Joiner*] failed to reply to this criticism." Since the Court saw the issue as whether 'these experts' opinions were sufficiently supported by the animal studies on which they purported to rely," the failure to respond to criticisms of the animal studies made the Court's task an easy one. Similar apparent failures to respond to criticisms of the use of certain epidemiologic studies resulted in the Court concluding that nothing requires a district court "to admit opinion evidence which is connected to existing data only by the ipse dixit of the expert." In short, the Court faulted the plaintiff's experts not because they relied on animal studies or epidemiologic studies that were not directly related to PCBs and/or small cell lung cancer, but because they failed to explain, presumably in terms that a court can understand, why and how the studies connect to the conclusions drawn from them. This result satisfied

neither the plaintiff nor the defendant, or their amici. As noted below, the practical result of this decision will be the presentation of extensive explanations, in lay language, of how and why certain data supports the conclusions of the experts. Nothing in the opinion suggests that once such explanations are given, Courts should decide which explanation is more plausible or which explanation is correct.

Of particular interest is that the District Court had artificially dissected the testimony of the expert witnesses by dropping from their analyses the consideration of the combined effects of PCBs, dioxins and furans. This dissection was not harmless since 1) the experts had never focused on the claim that PCBs alone contributed to the small cell lung cancer since, in their view, Joiner was not exposed to PCBs alone and 2) dioxins and furans are widely recognized to be potent carcinogens. This artificial dissection took on added significance once the Court of Appeals overturned the District Court's summary judgment on the issue of exposure to dioxins and furans and no appeal was taken from that part of the decision. The net effect of these events was that the Supreme Court was asked to review the admissibility of expert testimony that had been wrongly reduced to an irrelevant sub-point - i.e. did PCBs alone contribute to plaintiff's small cell lung cancer - rather than the proper question - whether PCBs, dioxins and furans together contributed to plaintiff's cancer.

Although the Supreme Court recognized that the dioxin and furan exposure issue had been wrongly decided by the District Court and that with such exposures the plaintiff may be able to prove his case, it did not realize that for that reason the case was probably inappropriate for review. The preferable course of action would have been to deny certiorari or, once having granted it, to dismiss the petition based upon the fact that the substantive issue before the Court - was the testimony of plaintiff's expert that PCBs alone contributed to his cancer - was not an issue in the case and was not the core of the opinion of plaintiff's experts. Instead the Court went on to issue what was essentially an advisory opinion. This advice is of dubious value, although it does provide a reemphasis of a point made in *Daubert* that the courts and litigants had ignored.

JOINER DOES NOT AMEND DAUBERT

While *Joiner* does add a gloss on the decision in *Daubert*, it does not change the basic admonitions that the District Court is to conduct a preliminary inquiry into the admissibility of expert opinion and that the inquiry is to focus solely on the methods and reasoning of the expert and

not on the conclusions. District Courts must give equal emphasis to whether the expert used scientific methods to reach her conclusions and whether the expert offered cogent reasons for drawing the conclusions from the information upon which the expert relied.

The decision recognizes Judge Becker's observation in *Paoli II*² that the line between opinion and methodology is blurry but it does not then authorize courts to ignore that line. The law exists in part because in the real world important lines are often blurry but nonetheless the line has to be drawn, case by case. What *Joiner* does hold is that unless the expert explains the bases for her conclusions, including conclusions about why certain evidence supports the ultimate conclusions, in logical and understandable laymen's language, the courts are going to reject such evidence where on its face, or following opposing expert criticism, it seems illogical. This echoes the opinions of the Ninth Circuit in cases like *Schudel v. General Electric*.³ Thus, because mice and humans seem different (a point Judge Weinstein made in the Agent Orange case fifteen years ago), absent a rational explanation for why a mouse study is relevant to humans, courts can reject reliance on mouse studies. Similarly, if an expert asserts that no evidence supports the conclusion that substance A causes outcome B, it will not be sufficient for the expert merely to dismiss a published epidemiologic study that finds a statistically significant association between exposure to A and outcome B by the ipse dixit that the study is an outlier. Experts on both sides are going to have to be very careful in both their analyses and their explanation of their analyses.

Courts of Appeal will now be particularly deferential to any conclusion reached by a District Court. Thus, where a District Court allows an expert to testify, they will probably not disturb the decision. Similarly, opinions excluding an expert likely will not be disturbed.

WITH FULLER EXPLANATIONS, COURTS WILL BE LESS INTRUSIVE

Contrary to the opinion of several commentators, *Joiner* is not likely to produce more intrusive analyses and decisions by district courts. The Supreme Court has put in place guidelines that make it less likely that district courts will be playing a major role in scrutinizing the opinions of competing experts except in those cases where the expert does not provide a rational basis for her conclusion. *Joiner* was written by the Chief Justice, who in the concurrence/dissent in *Daubert*, cautioned against judges

2. 35 F.3d at 746.

3. 1997 U.S.App.LEXIS 18468.

becoming amateur scientists. Thus, reading *Joiner* as imposing a heavier burden on the district courts to delve into science would be anomalous. First, the principal holding in the case is that appellate courts should have less, not more, to do with reviewing decisions on the admissibility of expert opinions. Second, by requiring an even more detailed report from the expert on both the methods used and the reasons applied, the Court has made it less likely that parties will offer experts who cannot explain how they reached their conclusions. Third, with a vastly expanded record from all experts it is less likely that courts will be able, or will want, to become enmeshed in deciding which expert's reasoning is correct. How would a court be able to decide whether the government scientists, who use animal studies to predict human health effects, or the industry scientists, who insist on having the results of human experiments, are correct? However, should a court choose to decide the correctness or persuasiveness of competing rational explanations from qualified experts, the decision would most starkly present the question of where is the line between the court and the jury on factual matters. Fourth, the expanded report obligation of the expert, coupled with the now unrestricted use of depositions of experts, further reduces the need for courts to hold evidentiary hearings and makes it more likely that courts will decide admissibility questions on the record presented by the lawyers.

Now that courts will be faced with competing lines of reasoning, the courts will likely see the analogy to judicial opinions where competing lines of reasoning appear in every case with split opinions and every case where an appellate court overturns a trial court. The fact of disagreement does not make one opinion reliable and the other unreliable. In addition, the consequence of judges deciding which expert's reasoning they agree with, would require that in every case they would reject one expert on each issue. Allowing the plaintiff's expert to testify would necessarily mean that they were rejecting the defendant's expert's reasoning and thus the defendant's expert's opinion would be inadmissible.

THE JURY QUESTION IS WHICH EXPERT TO BELIEVE,
NOT WHICH EXPERT IS RIGHT

The previous discussion also underscores that the nature of the inquiry in the court is not which scientist is correct but which scientist to believe. Scientific opinion usually comes to the courtroom because one or both parties, to prove or disprove a fact necessary to their position, offer the opinion of a scientific expert. It is not the province of the trier of fact -

either the judge or the jury - to undertake a scientific analysis to decide whether the scientific opinion is correct. One threshold requirement for admissibility of a scientific opinion (at least in federal court and in those states whose rules regarding evidence are modeled on the federal rules) is that the testimony of the expert "will assist the trier of fact to understand the evidence or to determine a fact in issue."⁴

Paradoxically, if the fact finders need an expert to "understand the evidence or determine a fact" it is unrealistic to assume the fact finders can understand the scientific issues sufficiently to resolve a dispute between competing scientific experts. It is for that reason that the courts are properly concerned that experts who testify follow scientific methods and use scientific reasoning. Our legal system can tolerate fact finders choosing between one of two scientists who have a scientific disagreement but it cannot tolerate fact finders choosing to believe all or any part of the opinion of a charlatan. Thus, federal courts must serve as gatekeepers.

Although it may seem surprising that fact finders are only deciding which portions of the scientific opinion, if any, to believe and not deciding the underlying question of which scientist is correct, this is also what fact finders do when presented with the testimony of fact witnesses. For example, if two witnesses who observed an automobile accident give opposite testimony on whether the light was red or green, fact finders must decide which portion, if any, of their testimony to believe since fact finders cannot determine which one is correct. Witnesses are cross-examined to attempt to inform fact finders of relevant information that would reflect on the believability of the witness. Opposing counsel poses questions such as where was the witness standing, how good was the witness' eyesight, was the witness really focused on the accident scene, did the witness have a bias for or against one party. But, short of being at the accident scene when the accident happened, fact finders cannot even attempt to decide which fact witness is correct.

Judges, like jurors, are usually untrained in science and therefore are no better able to understand the scientific principles involved in a case. Thus, the gatekeeping role for the judge also does not involve the judge deciding which expert is right. It is the job of the judge to make sure that experts who testify and who fact finders are entitled to believe, are those who use scientific methods and reasoning. In carrying out that task knowing the scientific method and reasoning applicable to the particular subject of the expert opinion is necessary for judges. Increasingly, each party will use their experts to give the Courts that education.

4. Rule 702 of the Federal Rules of Evidence.

SOME PRACTICAL CONSEQUENCES OF *JOINER*

How should practicing lawyers deal with this post-*Joiner* world? First, plan to spend a great deal more money to get experts to write long reports in support of their conclusions and long rebuttals of the attacks leveled against them by the opposing lawyers and experts. Lawyers will need to spend much time working with these experts to make sure they are willing to explain all of their reasoning. Reputable scientists are often reluctant to do this because in their field of expertise such explanations are not necessary. Other reputable scientists who do not accept their opinions do not believe that the opinions are scientifically unreliable, only that the opinions reflect either ideas that are yet to be proven or ideas displaced by more advanced scientific analyses. However, *Daubert* and *Joiner* now make it imperative that the experts fully explain the bases and reasons that support their conclusions, particularly in those cases where opposing experts, coached by counsel, frame their criticisms not in terms of scientific disagreement but in terms of "unreliable" science and failure to follow "scientific methodology and reasoning." These buzz phrases have become commonplace in expert reports though they represent phrases rarely, if ever, used by these experts before they reached the arena of litigation.

Second, cases that involve a significant stretch for the expert will become even less popular among plaintiff lawyers. It will not be sufficient at the screening stage of a case to identify an expert who is willing to say that A causes B. Now the lawyer must be sure that the expert can rationally explain why A causes B in those cases where there is not universal recognition of the conclusions advanced by the expert. This will mean spending more money to decide whether to take a case.

Third, because of the first two points, the number of cases involving one person whom a toxic or drug exposure has injured, that will make economic sense, will be narrowed. Plaintiffs will now have to consider that even cases with potential recoveries in the hundreds of thousands of dollars may not be viable because they will require substantial expenditures to get a case to the jury. This of course raises interesting questions of access to justice. However, it is unlikely that someone can establish in civil litigation that economic restraints on getting into Court are constitutionally objectionable, particularly where the costs to be incurred are the costs needed to prove that the scientific evidence upon which an expert relies makes sense and supports her conclusions. Such arguments should be advanced, if they are to have any chance to succeed, in states that have a strong constitutional provision protecting access to justice.

Fourth, experts in certain types of cases will develop generic concepts of scientific thinking that will appear in all expert reports to educate courts on the scientific process. In so far as the scientific process involves medical causation issues, these are some points plaintiffs' experts will likely make, as appropriate, in their reports:

1. The bases for causation opinions are combinations of pieces of evidence and not individual pieces viewed in isolation;
2. For each piece of evidence there must be a detailed, lay explanation, of what it is about the study, report, etc. which is relevant to the question at issue and why it supports that conclusion;
3. The expert's report must explain, to the extent possible, the mechanism of the disease; which animal studies can illuminate that mechanism; the relevance of mixed exposure epidemiological studies to the one chemical exposure of the plaintiff; why epidemiological studies might not find an association between exposure and health outcome but are still relevant to the expert's conclusion; why studies of exposures to chemical A are relevant to exposure to chemical B because of the way the human body metabolizes the chemicals; the relevance of the metabolites to the disease in question; why many types of disease and many types of exposure are unlikely to be the subject of epidemiological study because of the difficulty of having a large enough population to study (i.e., there is almost no study of the link between known carcinogens and prostate cancer because prostate cancer is so common it would require a very large study to find a statistically significant increase); the general limitations of epidemiological studies and thus why their absence is not fatal to a causation determination; and the list could go on.

Defense experts will have a similar list of basic principles that they will repeat in their reports in an attempt to educate the court about the fundamental point of view that underlies the defendants' reasoning. All this generic reasoning may soon appear in peer-reviewed journals and textbooks.

SOME FUTURE LEGAL DEVELOPMENTS FROM *JOINER*

Because *Joiner* is going back to the District Court to consider the arguments on furans and dioxins, we should shortly have a very good test of the application of *Joiner* to a fact pattern far different from the fact pattern that the Supreme Court reviewed. The plaintiff's experts, both of whom are extremely well-qualified, will have no problem providing lengthy and persuasive explanations of the scientific basis for concluding that exposure to PCBs, furans and dioxins together can cause the cancer which plaintiff suffered. They can provide overwhelming evidence that the use of studies from animals is not only appropriate in this kind of case but is widely used by every reputable government agency addressing causation issues. Defendants will provide qualified experts who will give opposite reasoning. Will the District Court attempt to decide which group of experts is more rational or will it adhere to the admonition of the *Daubert* court and its progeny and confine its inquiry to whether the experts provided rational reasoning, not which rational reasoning was most persuasive? Only time will tell. It is conceivable that the parties will resolve their differences before the District Court addresses the question. If so, other cases will shortly test the proposition.

Finally, *Joiner*, because it does not distinguish between scientific and other specialized knowledge, may be used to attempt to undermine the decisions in Courts like the Ninth and Tenth Circuits⁵ which have held that the specific kinds of tests required by *Daubert* are inapplicable where no scientific expert is testifying. Thus, although the expert still must present reliable evidence, she need not have met the suggested standards from *Daubert*. In such cases the Courts have taken a more hands off approach to the review of the expert opinion. After *Joiner* defendants will probably argue that courts should exclude the non-scientific expert if the expert does not explain, in lay terms, how and why she reached her conclusions. For example, in *Compton*, the expert had never tested the enhanced roof design that was required to avoid the effects of the rollover and apparently did not explain precisely how he knew that such a design would have made a difference and would be feasible. The problem will not be that the expert cannot give the explanation but that giving it will require substantially more work for the expert and costs for the party hiring the expert.

5. See *Compton v. Subaru* 82 F.3d 1513 (10th Cir. 1996); *McKendall v. Crown Control Corp.*, 1997 U.S.App.LEXIS 21035 (9th Cir. 1997).

JUSTICE BREYER'S CONCURRENCE AND COURT-APPOINTED EXPERT

In his concurrence, Justice Breyer suggests that given the complexity of the issues involved in cases like *Joiner*, courts may find it necessary to turn more frequently to the use of court-appointed experts under Rule 706 of the Federal Rules of Evidence. This is a suggestion which Justice Breyer reiterated in a much publicized speech to the American Association for the Advancement of Science in February. However, after the decision in *Joiner*, the need to use 706 experts is greatly diminished if not completely eliminated.

Rule 706 was added to the Federal Rules of Evidence in 1975, being modeled after Rule 28 of the Federal Rules of Criminal Procedure which was adopted in 1946. Significantly, in 1975 the Federal Rules of Civil Procedure addressed the use of experts in the courtroom in a manner which made the possible need for court-appointed experts more substantial. Under the then Rule 26(b)(4) the courts were just beginning to open the expert witness to discovery and abandoning the prior practice of many courts that refused to allow discovery of an expert at all.⁶ Thus, as of 1975, the expert of a party was still fairly insulated from full discovery. Depositions required approval of the court. Expert reports were limited to summaries of the opinions. Even the use of interrogatories and document production requests to obtain additional materials relied upon by the expert were controlled by the court.

In this context, the Advisory Committee, focusing on a concern with the "practice of shopping for experts, the venality of some experts, and the reluctance of many reputable experts to involve themselves in litigation," recommended formalizing the inherent power of the courts to appoint experts.⁷ The Advisory Committee actually believed that the mere threat of a court-appointed expert would tend to reduce the problem noting that "the assumption may be made that the availability of the procedure in itself decreases the need for resorting to it" because the "ever-present possibility that the judge may appoint an expert in a given case must inevitably exert a sobering effect on the expert witness of a party and upon the person utilizing his services."⁸

The conditions which motivated and justified the adoption of Rule 706 have now been addressed by more direct and inherently fairer methods. First, Rule 26 was amended in 1993 to greatly expand the obligations of testifying experts. Under Rule 26(a)(2) experts are now required to produce

6. Notes of the Advisory Committee accompanying the 1970 Amendments.

7. 1972 Advisory Committee Notes to Proposed Rules.

8. *Id.*

a "written report" with a complete statement of all opinions to be expressed and the basis and reasons therefor; the data or other information considered by the witness in forming the opinions; any exhibits to be used as summary of or support for the opinions; the qualifications of the witness, including a list of all publications authored by the witness within the preceding ten years; the compensation to be paid for the study and testimony; and a listing of any other cases in which the witness has testified as an expert at trial or by deposition within the preceding four years.

In addition Rule 26(b)(4) was amended to explicitly allow depositions of experts. Second, in the *Daubert* opinion the Supreme Court placed the emphasis on the obligation of the Court to ascertain whether the expert opinion was reliable as a precondition for its admission. Among the relevant criteria for reliability was the scientific integrity of the methods used for reaching the opinion. Thus, rather than use a court-appointed expert or the threat of such an expert to assure that the expert opinion offered was reliable, *Daubert* properly placed that responsibility on the party offering the expert opinion. Finally, with the decision in *Joiner*, the Court made clear that it was the duty of the courts to ascertain from the witness the bases and reasoning for the opinions being offered. Where the Court cannot understand (understanding is different than agreeing with) the nexus between the evidence upon which the expert relies and the conclusions reached by the expert, as was the case with the expert opinions in *Joiner*, the court may exclude the expert. Thus *Joiner* underscores the inherent power of a court to look to the experts who are before the court to assure that a clear and cogent presentation is made by the expert.

These developments leave little if any need for appointment of a 706 expert. If, as Justice Breyer indicates, the issues in some of these cases are complex and difficult for the court or the jury to understand, the court should look to the experts who are already before the court to overcome the complexities. Why should the court go to the expense and delay inherent in hiring another expert to whom the court will pose a series of questions, when the court can pose the same questions to the experts for the parties? As the challenges to experts become more detailed and specific, the papers filed with the courts are already alerting the courts to the issues and raising questions for the courts. The court need only address its questions to the parties and wait for the experts to further elucidate. Given the limited time available to judges, it will be most efficient for the court to send written questions and receive written responses with whatever supplemental briefing may be necessary.

In light of the ease with which the court can force the parties to answer any scientific or expert concerns, the inherent problems with the court-

appointed expert take on added significance and raise serious questions about the propriety of using such experts in any case.

A frequently articulated justification for the usefulness of court-appointed experts is that for any case, there is a "truth" which an independent expert can find and articulate somewhere between the "extreme" views of the competing partisan experts. More often than not the scientific issues which underlie competing expert opinions (such as how much evidence is enough evidence to conclude that exposure to a particular chemical is "more likely than not" capable of causing an adverse health outcome) are issues for which there is no one right answer, and truth, like beauty, is in the eye of the beholder. Thus, the mere existence of a wide gulf between competing opinions is not evidence of the existence of some middle ground of truth, but rather evidence that the issue in litigation, is, not surprisingly, one which is not yet scientifically settled. Thus the belief that there is one "truth" which can be found in seeking to resolve scientific issues in those cases where the issues are so unsettled that litigation is formed around them, is a mythical belief unsupported by real world events. Litigation is unlikely to bloom in the soil of scientific certainty and clarity.

The so-called "independent" expert is also a myth. If the scientist is actually an "expert" on the subject of interest and the issue is a controversial one within the relevant discipline, the expert will surely have some views on which position is correct. If the expert has no views on the subject, it is doubtful that the expert really has specialized expertise on the issue before the court. Rather the expert will for the first time be reviewing the information and forming an opinion on it. It is unlikely that such an opinion will prove useful. For example, would a patient seeking a second medical opinion about a proposed operation seek that opinion from a doctor who had never before formed an opinion on that question? The second opinion would be sought from a doctor who had made judgments about the question on many other occasions. On the hotly contested scientific issues involved in litigation, there is no expert who is both independent and an expert on the precise issues before the court.

The use of court-appointed experts are expensive, an expense which more often burdens plaintiffs than defendants. In addition, some courts ignore the advice of their appointed experts. In a recent breast implant case, a federal court in Oregon hired four "independent" experts, at great expense in both time and money, and then proceeded to disregard virtually all of the advice he received from those experts. *Hall v. Baxter Healthcare Corp.*,⁹ Although there has been some limited success with court appointed experts,

9. 947 F.Supp. 1387 (D.Ore. 1996).

the reluctance of courts to use such experts is probably a reflection of the judges' suspicion that the so-called "neutral" expert is a myth and that court appointed experts add just another layer of expert opinion to an already burdened record. To the extent the courts do not understand the issues and they need some background on the subject matter of the scientific opinions, they should use the powers already given them under Rule 104 and 702, as emphasized by the Supreme Court in *Daubert* and *Joiner*, to get their education from the experts the parties have selected, not from outside experts.

CONCLUSION

Like its predecessor, *Joiner* is already creating a flurry of activity in the courts and the law journals. However, as courts and lawyers begin to apply the teaching of *Joiner* the result is likely to be a reduced role for the courts in screening experts and an increased role for lawyers in screening their own experts. If that occurs, *Joiner* will provide a benefit to both sides in litigation and will ultimately improve the legal system.

