

Linguistic Society of America

The Linguist on the Witness Stand: Forensic Linguistics in American Courts

Author(s): Peter Tiersma and Lawrence M. Solan

Reviewed work(s):

Source: *Language*, Vol. 78, No. 2 (Jun., 2002), pp. 221-239

Published by: [Linguistic Society of America](#)

Stable URL: <http://www.jstor.org/stable/3086556>

Accessed: 12/01/2013 20:00

Your use of the JSTOR archive indicates your acceptance of the Terms & Conditions of Use, available at <http://www.jstor.org/page/info/about/policies/terms.jsp>

JSTOR is a not-for-profit service that helps scholars, researchers, and students discover, use, and build upon a wide range of content in a trusted digital archive. We use information technology and tools to increase productivity and facilitate new forms of scholarship. For more information about JSTOR, please contact support@jstor.org.



Linguistic Society of America is collaborating with JSTOR to digitize, preserve and extend access to *Language*.

<http://www.jstor.org>

THE LINGUIST ON THE WITNESS STAND: FORENSIC LINGUISTICS IN AMERICAN COURTS

PETER TIERSMA

Loyola Law School

LAWRENCE M. SOLAN

Brooklyn Law School

It is becoming increasingly common for linguists to testify as expert witnesses in both civil and criminal trials. Often linguistic expertise is clearly helpful to the judge or jury. Based on published judicial opinions, from which we draw our data, it appears that courts have allowed linguists to testify on such issues as the probable origin of a speaker, the comprehensibility of a text, whether a particular defendant understood the *Miranda* warning, and the phonetic similarity of two competing trademarks. In other areas the admissibility of linguistic testimony has been more controversial, including author and speaker identification, discourse analysis, the meaning of legal texts, and the comprehensibility of jury instructions. Reasons for judicial reluctance to admit linguistic expertise include concerns that it is not sufficiently reliable, the belief that issues like the meaning of a text can just as well be decided by a jury, and sometimes even institutional and political considerations. Despite such reservations, courts generally recognize that there is a place for linguistic expertise in appropriate cases.*

Linguists are appearing with increasing frequency as expert witnesses in American courtrooms. Nonetheless, in many cases where one side or the other wishes to present linguistic evidence—either through testimony or some other means—the judge refuses to admit it. This raises questions of why courts are more receptive to linguistic expertise in some types of cases than in others, and when they ought to accept linguists as experts.

Linguistic issues can arise in a great variety of legal contexts. Specific subjects that linguists may address include the likelihood of confusion in trademark cases; miscommunication because of dialect differences; the comprehensibility of legal documents; the meanings of statutes, wills and contracts; the identification of authors and speakers; the ability of jurors to understand instructions, or of an arrested person to comprehend the *Miranda* warning; and many more. Almost any area of linguistics can be relevant in court. Phonetics, for example, is important in trademark cases where the sound similarity of two names is in question, as well as in speaker identification. Discourse analysis has been used to help jurors understand covertly recorded conversations in criminal cases. Syntax, semantics, and pragmatics are all relevant when the meaning of legal documents is at issue. Smaller subfields of linguistics may also have relevance in a legal dispute. Thus, a dialectologist might help identify the place of origin of a speaker on a tape-recorded bomb threat.

In this article, we will review some of the substantive legal areas in which linguistic expert testimony has been admitted, and others in which its admissibility has been more controversial. We will not focus on reports by forensic linguists themselves. Judith Levi (1994) has already published an overview of cases in which linguists have reported on their experiences in court, and Roger Shuy (1993, 1998) has written two books describing some of his experiences.¹ In contrast, we draw our examples from published

* We would like to thank Darren Nakano and Leslie Nathan, former students of Loyola Law School in Los Angeles, and former Brooklyn Law School students Robyn Schneider and Amy Sender for their assistance. We are also grateful to Roger Shuy and the *Language* referees for many helpful comments. This research was supported in part by a summer research stipend from Brooklyn Law School and the Joseph Scott Fellowship from Loyola.

¹ In addition, several anthologies contain reports of linguists' experiences as experts. See Gibbons 1994, Rieber & Stewart 1990, Levi & Walker 1990, and Cotterill 2002. Moreover, the journal *Forensic Linguistics*, now in its eighth year of publication, contains such reports.

judicial opinions in the United States. In almost all American jurisdictions, only published opinions can serve as precedents.² A court deciding whether to permit a linguist to testify is most likely to turn for advice to the record of published judicial opinions. We therefore think it is useful, for both the legal and linguistic communities, to investigate and report on that record.

Our legal research found over one hundred published judicial opinions, not counting voiceprint cases, in which language experts were mentioned. (We deal with the issue of voiceprints separately below.) Most of these are decisions by federal and state appellate courts. Often, the party who offered the testimony of an expert witness at trial appealed the trial court's ruling not to allow such testimony. Because appellate review of evidentiary decisions under American law is very deferential to the trial court, such rulings are often upheld on appeal (Weinstein & Berger 1998). One might therefore get the impression that linguists only seldom participate in the judicial system, and are largely unwelcome. But this would be a serious misinterpretation of the facts for three reasons.

First, and perhaps most important, our analysis of the published opinions shows that on some types of issues, testimony by linguists occurs virtually without controversy, while on others, courts are far more likely to reject the offer of expert linguistic testimony. It is on these distinctions that we wish to focus this article, first describing the issues, later offering explanations for some of the more salient discrepancies.

Second, accounts by linguists themselves (e.g. Levi 1994), show active participation by linguists in many areas of the legal system. For example, in his book *Language Crimes*, Roger Shuy (1993:xx) notes that he had consulted in over two hundred cases and had testified in about thirty-five cases. While Shuy is probably the most active American linguist in terms of legal consulting, these figures suggest that published opinions tell only part of the story.

Third, the number of published appellate opinions is quite small in relation to the overall number of cases in the judicial system. For example, 1998 data from the United States Department of Justice show that more than three hundred thousand cases were 'terminated' in the federal trial courts (district courts) that year, after a trial, a motion to dismiss, settlement, and so on.³ In that same year, about fifty-two thousand appeals were terminated. This number suggests that most cases are never appealed. Of the completed appeals, only about twenty-five thousand were decided on the merits, and of those, only about six thousand resulted in published opinions by the United States courts of appeals. This means that only about 11 percent of appellate court cases generated published opinions.⁴ Moreover, comparing the total number of cases terminated in the federal trial courts in 1998 (300,000) with the total number of published opinions by the federal appellate courts in that same year (6,000), one is forced to conclude that the percentage of federal cases that result in a published appellate opinion is quite

² In our understanding, this is not true in England, where a case can function as a legal precedent even if it was never published.

³ The data in this paragraph are taken from a United States Department of Justice Report, *Judicial Business of the United States*, published at www.uscourts.gov/dirpt98/index.html (pp. 16, 29, 54). The United States District Court is the trial level court in the federal judicial system. Corresponding data from state courts varies from state to state. For example, in California, roughly 9 percent of majority opinions issued by the courts of appeal are published (Judicial Council of California, *1997 Judicial Council Report on Court Statistics*, Table 9, p. 29).

⁴ The actual percentages are even smaller since it is not unusual for certain complex cases to generate multiple opinions. These rough estimates, however, are good enough to serve our purposes here.

small, almost certainly under ten percent, and probably well under five percent of all lower court cases.

In this context, the presence of more than one hundred published judicial opinions that deal with linguistic expertise implies substantial participation by linguists in the legal system. Only those cases in which the linguist's testimony was controversial would ever result in an opinion that addresses the admissibility of linguistic expertise. Of those controversial cases, only a relatively small percentage results in opinions that are published. Assuming quite conservatively that each published appellate opinion represents at least ten trial court cases, the more than one hundred published judicial opinions that mention linguistic experts may represent very roughly a thousand trial-court cases in which linguistic expertise was involved in some way.

Another way to address the issue is to look for published opinions making reference to linguistic experts in a single year. We found eleven such cases in 1998: two from the United States Courts of Appeals; five from the United States District Courts; and four from state appellate courts. Extrapolation from these figures suggests that linguists most likely played a part in approximately one hundred cases in just one year. Obviously, these quantitative inferences are quite coarse. Moreover, the relative novelty of linguists on the witness stand may result in more appeals and an overrepresentation of such cases in the reported appellate opinions; if so, our estimates would have to be adjusted downward. Nonetheless, the data strongly suggest that there has been considerable participation by linguists in the American legal process.

Despite these indications of an increasing presence of expert linguists in American courtrooms, our own perception—both of us were practicing lawyers before becoming legal academics—is that the vast majority of American lawyers and judges have little or no experience with linguistic expertise in a legal matter. Many have never even heard of it. This suggests that it is not self-evident to lawyers and judges that linguists can be of help in resolving legal disputes. We hope this article will clarify for both linguists and members of the legal community just where linguistic expertise can be helpful.

We will first describe the evidentiary standards under which courts are supposed to decide whether to permit expert testimony in general. It appears to us that linguistic expert testimony meets these standards in a wide range of cases. But we will show that while courts are often very receptive to testimony by linguists, they shy away when it conflicts with certain beliefs about language and cognition deeply entrenched in the legal system. In some instances, these observations suggest that expert testimony from linguists would be better received if it were tailored to meet the needs of the legal system. In other instances, they suggest that it may be time for the legal system to reexamine some of its long-standing tenets about the nature of language.

1. THE ADMISSIBILITY OF EXPERT EVIDENCE IN AMERICAN COURTS.⁵ Until the Federal Rules of Evidence were adopted in 1975, the predominant standard for the admissibility of expert testimony was the *Frye* test, named for a 1923 United States Court of Appeals decision, *Frye v. United States* (293 F. 1013 (D.C. Cir. 1923)). *Frye* involved a trial court's refusal to admit the results of a lie detector test (called a 'systolic blood pressure deception test') offered through an expert to prove the defendant's veracity in a murder case. The court of appeals affirmed the trial court's decision, articulating a standard

⁵ For an expanded version of this section, addressed primarily to a legal audience, see Solan 1999.

for admissibility that was routinely followed for some fifty years, not only by other federal courts, but by many state courts as well. The court held:

Just when a scientific principle or discovery crosses the line between the experimental and demonstrable stages is difficult to define. Somewhere in this twilight zone the evidential force of the principle must be recognized, and while courts will go a long way in admitting expert testimony deduced from a well-recognized scientific principle or discovery, the thing from which the deduction is made must be sufficiently established to have gained general acceptance in the particular field in which it belongs. (293 F. at 1014).

Despite its wide acceptance, the *Frye* standard came to face increasing criticism as being too tough. Science often involves controversy, and many significant scientific theories never gain general acceptance. The critics argued that it would make more sense for courts to permit the trier of fact (the judge, or the jury in a jury trial) to hear arguments on both sides of a controversial issue and to weigh the evidence, rather than to preclude the jury from hearing the evidence at all. Defenders of a more restrictive test, then as now, worried about 'junk science' (see Huber 1991).

In 1975 the Federal Rules of Evidence came into effect. Rule 702, which governs the admissibility of expert testimony, originally reads as follows:

If scientific, technical, or other specified knowledge will assist a 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.

Rule 702 therefore required that expert testimony must help the judge or jury understand the evidence or decide what happened. On its face, this is a more relaxed standard than *Frye*'s requirement of 'general acceptance in the particular field in which it belongs'.

The adoption of Rule 702 did not, however, lead to the immediate demise of the *Frye* standard in the federal courts. Rather, it led to a period of uncertainty as to just what the standard really was. Some federal courts understood Rule 702 as having replaced *Frye*, while others continued to follow *Frye*, which was deeply entrenched after all those decades.

This lack of consensus continued until 1993, when the Supreme Court decided *Daubert v. Merrell Dow Pharmaceuticals, Inc.* (509 U.S. 579 (1993)). The issue in *Daubert*, a products liability case, was whether Bendectin, an antinausea drug taken during pregnancy, had caused birth defects in the plaintiff's children. The epidemiological literature suggested that it did not. The plaintiffs in *Daubert* wanted to call experts who would attack the inferences drawn from the data in the published literature and bring to bear the results of animal studies. The trial court had rejected the experts on the grounds that their work had not been published, and therefore failed to meet the standards of scientific acceptance that the courts had developed under *Frye*. It thus granted summary judgment to the defendant, Merrell Dow (727 F. Supp. 570, 572 (S.D. Cal. 1989)). The court of appeals affirmed the trial court's decision (951 F.2d 1128 (9th Cir. 1991)).

The Supreme Court reversed the decision of the court of appeals, holding that the Federal Rules of Evidence had replaced the *Frye* standard. It interpreted Rule 702 as requiring courts to engage in a 'preliminary assessment of whether the reasoning or methodology underlying the testimony is scientifically valid and of whether that reasoning or methodology properly can be applied to the facts in issue' (509 U.S. at 592–93). To be 'scientifically valid' the proffered evidence need not be uncontroversially accepted in the scientific community. Rather, '[t]he adjective "scientific" implies a grounding in the methods and procedures of science' (509 U.S. at 590).

The Court did not attempt to state the conditions that are both necessary and sufficient for evidence to be scientifically valid. It did suggest, however, four nonexclusive indicia.

1. whether the theory offered has been tested;
2. whether it has been subjected to peer review and publication;
3. the known rate of error; and
4. whether the theory is generally accepted in the scientific community. (509 U.S. at 593)

The *Daubert* opinion has been the subject of much discussion, often critical. What complicates the matter is that some states have retained the *Frye* test, or tests similar to it. Thus, the case law based on *Frye* continues to be relevant in many of those jurisdictions.⁶ Still, there is no doubt that *Daubert* has become the leading opinion in this area.

One question that *Daubert* left open was whether it applies to testimony that is not strictly scientific. One could argue, for example, that testimony on a legal text's range of possible interpretations is more descriptive than theoretical, and that therefore the *Daubert* approach should not apply. In a recent opinion, *Kumho Tire Co. v. Carmichael* (119 S.Ct. 1167 (1999)), the Supreme Court rejected this type of argument. *Kumho Tire* was a product liability case about automobile tires. In allowing the exclusion of a tire expert whose offered testimony was based on his experience in the industry, the Court held that 'the general principles of *Daubert*' apply not only to experts offering scientific evidence but also to experts basing their testimony on experience (119 S.Ct. at 1173). While the Court admitted that the *Daubert* factors may not all be applicable in a given case, it stressed that the overall approach to evaluating reliability should be followed. Significantly, the Court went on to hold that the key to deciding the admissibility of expert evidence is whether the expert 'employs in the courtroom the same level of intellectual rigor that characterizes the practice of an expert in the relevant field' (119 S.Ct. at 1176). We therefore cannot avoid asking how linguistic testimony stands up to the *Daubert/Kumho Tire* factors.

Moreover, in response to *Daubert* and *Kumho Tire*, Rule 702 has recently been amended. It now reads:

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.

At least in the federal courts, this is the standard against which linguistic expert testimony will be evaluated.

2. EXPERT LINGUISTIC EVIDENCE IN THE AMERICAN LEGAL SYSTEM. At least in theory, linguistic evidence should fare quite well regardless of the evidentiary standard that is applied. Linguistics is a robust field that relies heavily on peer-reviewed journals for dissemination of new work. Furthermore, much of the expert testimony offered is in keeping with very basic literature in the field. For example, when a linguist is asked to testify about a criminal defendant's proficiency in English, the expert has available a number of well-accepted instruments and a great deal of learning on which to base an analysis.

⁶ A United States Supreme Court decision on evidence is binding only on federal courts, unless it is based on constitutional grounds. Individual states may choose to follow the *Daubert* standard, or continue to follow *Frye*, or may adopt another standard entirely.

It is true, of course, that there is controversy over certain issues in the field. Consider the English passive construction. Within the linguistics community, there is lively debate over how passives really work. Are they formed by transforming active sentences into passive ones, or are they formed more or less as they appear, with other rules telling us how to relate them to corresponding active structures? There are linguists in both camps. Peter Culicover (1997) is in the former, Joan Bresnan (1978) in the latter. But almost all of these controversies are entirely tangential to any testimony that a linguist might give on the range of interpretations available to sentences with passive constructions. The resolution of that debate in favor of one side or the other would not affect an expert's testimony. Thus, while there may be disagreement as to WHY we understand a given linguistic structure to have a particular range of meanings, the FACT of the range of meanings should not normally be controversial.

For this reason, it seems relatively straightforward that linguistic testimony based on the kinds of analyses that linguists use in the scholarly literature should meet either the *Daubert* or the *Frye* standard. We present some examples below.

2.1. THE MEANING OF LANGUAGES OTHER THAN STANDARD AMERICAN ENGLISH. As the reader will see later in this article, judges are often reluctant to allow expert testimony on the meaning of a text in ordinary standard English. In contrast, they have little trouble with admitting testimony on foreign languages or on nonstandard registers. Of course, this area of knowledge involves language but is not necessarily the exclusive domain of professional linguists. For that reason, we have not systematically covered such cases, of which there are a substantial number.

An example of testimony on the meaning of a non-English term is when an expert in Shoshone-Bannock was allowed to testify how the Shoshone might have understood the English term *hunt* in a treaty. The linguist testified that the Shoshone-Bannock translations would not systematically distinguish between fishing and hunting, but referred to gathering wild food in general (*State v. Tinno*, 497 P.2d 1386 (Idaho 1972)).

The meaning of technical language or jargon is also a common legal issue, especially in contract cases, and is likewise freely admitted, even if the expert is not a trained linguist. Thus a doctor might testify as a 'medical lexicographer' on the meaning of a medical term (*Hagenkord v. State*, 302 N.W.2d 421 (Wis. 1981)). An important caveat is that judges will generally not allow linguists to testify on the meaning of legal terminology, viewing themselves as the experts in this area.

Another type of specialized language is argot and code, often associated with criminal activity. In one case, a government agent testified that in a particular case, *the boyfriend*, *the boy*, *transcripts*, *briefs*, and *motions* meant 'heroin', and that *the girl* and *them broads* meant 'cocaine' (*United States v. Simmons*, 923 F.2d 934 (2d Cir. 1991)). This type of testimony, typically by law enforcement officers, is almost invariably allowed. Overall, judges seem well aware that they and jurors need assistance in understanding foreign words and phrases, technical terminology, and code or argot.

2.2. DIALECTOLOGY. Although there are not many published cases, linguists have on occasion testified on the dialects of English or other languages. In the well known *Ann Arbor* case, several experts on Black English Vernacular or Ebonics testified about the characteristics of that variety of English; the court discussed the testimony in detail (*Martin Luther King Junior Elementary School Children v. Ann Arbor School Dist. Board*, 473 F. Supp. 1371 (E.D. Mich. 1979)). At least one opinion in an employment discrimination case mentions the testimony of a linguist on the value judgments that can be associated with how one speaks: people often view speakers of nonstandard

dialects as being less educated and competent (*Polk v. Yellow Freight Systems*, 801 F.2d 190 (6th Cir. 1986)).

Moreover, many linguists have expertise in identifying dialects of individual speakers, which could be quite useful in determining whether a particular defendant made a recorded incriminating or threatening statement. Oddly, we have found only one published opinion discussing such evidence (*People v. Clarke*, 277 N.E.2d 866 (Ill. 1971); cf. Labov & Harris 1994). Nonetheless, because most judges and juries have limited experience in this area, we believe that linguistic expertise on dialects and dialectology would generally be admitted with little controversy.

2.3. COMPREHENSIBILITY AND READABILITY. When the issue has been the comprehensibility or readability of texts, courts issuing published opinions have tended to allow experts on language to testify. Admittedly, one court has ruled that whether the average customer could understand a standard form collection letter threatening legal action against the recipient was a matter of common sense and did not call for expert testimony (*United States v. ACB Sales and Service, Inc.*, 590 F. Supp. 561 (D. Ariz. 1984)). That case, however, seems to be the exception.

More often, testimony concentrating on the comprehensibility of legal documents that are directed to the public is admitted. In a case that presaged the 2000 presidential election, a linguist testified in a Florida case that a ballot containing an amendment to a county charter was confusing. The trial court, seconded by the court of appeal, acknowledged the testimony but concluded that most voters would have properly understood the ballot (*Wadhams v. Board of County Commissioners*, 501 So. 2d 120 (Fla. Dist. Ct. App. 1987)). Interestingly, the Florida Supreme Court reversed. Although not specifically referring to the linguist's testimony, the Court held that 'deception of the voting public is intolerable and should not be countenanced' (*Wardhams v. Board of County Commissioners*, 567 So. 2d 414, 418 (Fla. 1990)).⁷

Less commonly, language experts have testified on the comprehensibility of jury instructions. An example is the case of James Free, who was condemned to death for murder in Illinois (*United States ex rel. Free v. Peters*, 806 F. Supp. 705 (N.D. Ill. 1992); see also Tiersma 1995). Free challenged his death sentence, arguing that the instructions given to the jury were misleading and obscure. The trial court listened carefully to various experts, including a linguist, and decided that jurors likely did not understand instructions on how to decide whether to impose the death penalty. But the court of appeals had an almost disparaging attitude towards the research (12 F.3d 700 (7th Cir. 1993)) and quickly affirmed Free's death sentence. Although there are not many cases, we would have to conclude that the admissibility of linguistic expert testimony on the comprehensibility of jury instructions is uncertain at best. Later, we will suggest a reason for this reaction.

2.4. LINGUISTIC PROFICIENCY. Another factual issue that sometimes arises in court is the linguistic proficiency of a particular person. For example, it may be unclear whether a criminal defendant understood the *Miranda* warning. Or an accused may have consented to a search without fully understanding the implications. Again, there are not a great many published opinions in this area, but courts have generally allowed expert testimony on the linguistic competence of a specific individual. In one case, a sign language expert was allowed to testify that a defendant had clearly invoked his right

⁷ See also *Coleman v. Block*, 589 F. Supp. 1411 (D.N.D. 1984).

to counsel, which meant that the subsequent interrogation—without a lawyer present—was illegal (*People v. Smith*, 37 Cal. Rptr. 2d 524 (Cal. Ct. App. 1995)).

It is worth emphasizing at this point that even if testimony is admitted, the ‘finder of fact’ can decide how much value to place on it. Thus, in *United States v. Gutierrez-Mederos* (965 F.2d 800 (9th Cir. 1992)), the court admitted testimony by a linguist supporting the defendant’s claim that when he consented to allow police to search his possessions, his cultural background and limited English proficiency prevented him from understanding that he had a right to refuse. Although the judge allowed the linguist to testify, the court gave little weight to the testimony, noting that the linguist had never actually interviewed the defendant, and consequently holding that the defendant’s consent to search was valid. This point applies to all areas in which linguistic expertise might be brought to bear: the judge or jury can give it as much or as little weight as they feel appropriate.

2.5. LINGUISTIC ISSUES IN TRADEMARK CASES. Linguistic expertise, and especially phonetics, has also been relevant to legal proceedings in trademark law. The critical question in many trademark cases is whether the name that a person or company is using for a product is confusingly similar to an existing trademark. Often that depends on the phonetic similarity between the two marks. Trademarks that have been found to be confusingly similar include *Beck’s Beer* and *Ex Bier*; *Comsat* and *Comset*; *Diaparine* and *Dyprin*; *Dramamine* and *Bonamine*; *Listerine* and *Listogen*; *Lorraine* and *La Touraine*; *Smirnoff* and *Sarnoff* (McCarthy 1992:§23.6(1)).

Trademark law has long relied on expert testimony, which often includes surveys of whether people are actually confused by the similar names. Therefore, it is not surprising that courts have almost universally and without extensive comment admitted testimony by linguists in this area, at least as reflected in the published opinions. For example, if one company has a valid trademark in the name *Aveda* and a second company begins to use the name *Avita* on similar products, the second company may be infringing on the trademark of the first. In this particular case, a professor of English and linguistics testified via an affidavit that intervocalic *t* and *d* are often pronounced the same in these words, and that the middle vowels (*e* and *i*) may also be. Thus the marks may be—or may almost be—homophones. Based in part on this evidence, the judge granted an injunction that prohibited the defendant from further use of *Avita* (*Aveda Corp. v. Evita Marketing, Inc.*, 706 F. Supp. 1419 (D. Minn. 1989)).

Linguistic expertise has been brought to bear on other trademark issues as well. Is the *Mc-* in *McDonald’s* generic—and thus a relatively productive morpheme—or is it specifically identified with the McDonald’s Corporation? One court received extensive linguistic testimony on both sides, which concentrated on the use and meaning of *Mc-* in many ordinary texts. The court eventually decided that *Mc-* was tied to the McDonald’s Corporation, rather than being an ordinary English prefix. Thus, McDonald’s was entitled to protect its ‘morpheme’ from being used by a chain of inexpensive McSleep motels (*Quality Inns International, Inc. v. McDonald’s Corp.*, 695 F. Supp. 198 (D. Maryland 1988)).

3. PROBLEM AREAS: JUDICIAL RELUCTANCE TO ADMIT EXPERT TESTIMONY BY LINGUISTS. Although the legal system has often welcomed linguistic expertise, there are a number of areas in which they are more hesitant to do so. One example is the use of linguistics to identify authors or speakers. Courts sometimes question whether linguistic theory is able to meet the standards of *Frye* or *Daubert* with respect to these areas. Other uses of linguistics that have not always been accepted by the courts are discourse

analysis and testimony on the meaning of contracts and statutes. In both cases, courts are reluctant to admit linguistic evidence not only because of the evidentiary issues raised by the *Frye* and *Daubert* requirements, but also because they fear that linguistic expertise might usurp the role of the judge or jury. We conclude our overview of problem areas with a discussion of the comprehensibility of jury instructions, where courts tend not to accept linguistic expertise because it might challenge the legitimacy of an important legal institution.

3.1. DISPUTED AUTHORSHIP. Recent discussion in the press of the JonBenét Ramsey murder investigation in Colorado has brought into the public spotlight the issue of using linguistic techniques to identify authors. Unfortunately, the publicity has not been good for those who believe that linguistic analysis can shed light on this problem.

Early in the morning of December 26, 1996, Patricia Ramsey reported to authorities that her six-year-old daughter, JonBenét, was missing from their Colorado home, and that she had found a ransom note in the house.⁸ Later that day, JonBenét's body was discovered in the basement. To date, no one has been charged with the child's murder, although theories abound in the numerous books, articles, and web discussions that the case has generated. Some of these theories allege that the parents were involved.

A critical question is who wrote the ransom note. Professor Donald Foster, an English professor at Vassar College who is well known for using stylistic analysis to identify authorship in both literary texts and legal cases (Foster 2000), first attributed the note to someone who did not write it. He wrote a letter to JonBenét's mother asserting her innocence.⁹ Later, after examining additional materials, Professor Foster candidly changed his position and determined that Mrs. Ramsey had written the note. Such incidents help to justify the law's concern about methodology. Regardless of how one looks at the merits of the Ramsey case, if 'forensic stylistics' or author identification is to comply with evidentiary standards, it must use scientifically validated techniques.

Although it has generated a fair amount of scholarly discussion (e.g. Finegan 1990 and McMenamin 1993), analysis of texts in cases of disputed authorship has not led to a great many published cases. In one such case (*United States v. Clifford*, 704 F.2d 86 (3d Cir. 1983)), the court rejected testimony about a 'Forensic Linguistic' method of handwriting and stylistic analysis, which it deemed of questionable reliability. It held that the jury could reach its own conclusions from the samples provided without the assistance of experts.

Clifford shows a peculiar hole in the American system of evidence. The issue in that case was whether the defendant was the author of a threatening note. The government tried to offer the testimony of a forensic linguist expert in stylistic analysis. The court summarized his testimony as follows:

Dr. Miron testified that forensic linguistic analysis is the process of matching stylistic similarities in different documents and then of assigning weight to those similarities according to their distinctiveness and frequency of occurrence. He further stated that such an analysis could not provide a positive means of identifying the author of an anonymous document. He indicated that the results of forensic linguistic analysis could be probative in establishing authorship but could not prove that one person, to the exclusion of all other possible authors, had written a document. (704 F.2d at 88)

⁸ The ransom note can be found at http://www.jameson245.com/ransomnote___p1.jpg.

⁹ The text of the letter is available at various sites on the web. It was also reported in the press. See Lisa Levitt Ryckman, 'Book details linguistic scholar's role in Ramsey case,' *Denver Rocky Mountain News*, April 11, 2000. For Foster's account, see Foster (2000:16–17).

This was enough to keep the testimony out under the *Frye* standard, and, for the most part, under *Daubert* as well. On appeal, however, it was determined that the documents themselves should be admitted and that the jury should make its own determination of their similarities.

This, in our opinion, is a remarkable state of affairs. If forensic testimony is precluded because the expert cannot form a definitive opinion, then jurors, not knowing how to evaluate what they see, will be forced to reach conclusions that are even less supported by the evidence. At the very least, experts should be permitted to assist jurors by advising them of the risk that they might make too much of the similarities between documents.

A more recent case, *United States v. Van Wyk* (83 F. Supp. 2d 515 (D. N.J. 2000)), illustrates why courts are wary of permitting experts in forensic stylistics to identify authors. The court there permitted an FBI agent with training in forensic document identification to testify about the similarities between certain threatening letters and the defendant's known writings, but did not allow him to offer an opinion about authorship of the documents whose origin was in dispute. As the *Van Wyk* court explained, we do not have good corpora and appropriate analytical tools that permit inferences as to how likely it is that a document was produced by a particular person.

Although Fitzgerald [the FBI agent offered as a stylistics expert] employed a particular methodology that may be subject to testing, neither Fitzgerald nor the Government has been able to identify a known rate of error, establish what amount of samples is necessary for an expert to be able to reach a conclusion as to probability of authorship, or pinpoint any meaningful peer review. Additionally, as Defendant argues, there is no universally recognized standard for certifying an individual as an expert in forensic stylistics. (83 F.Supp.2d at 522)¹⁰

It is not unreasonable to argue that allowing an expert to point out similarities and differences between a defendant's known writings on the one hand, and questioned writings in the case on the other, is better than simply giving the documents to the jury without any guidance whatsoever, leaving the jurors to their own devices. Yet this solution is far from ideal. Because jurors will not know how significant the similarities and differences between the two sets of documents really are, they can easily reach the wrong conclusion. In fact, this absence of baseline information is the very reason that expert opinion testimony was not allowed. Moreover, in *Van Wyk*, the expert was an employee of the FBI, who was called to point out the similarities between the disputed documents and documents known to be authored by the defendant. It seems unfair in criminal cases to permit the government to offer expert testimony based on insufficient baseline data, and then to place upon the defendant the burden to rebut that evidence through cross-examination or by calling another expert in forensic stylistics.

We believe that ultimately the only responsible solution is for the linguistic and legal communities to work together toward developing techniques from which reliable inferences about authorship can be drawn. This task will inevitably require the collection of large corpora of informal written language and sophisticated computer programs to analyze the data. Fortunately, such work is underway, both by government and by academic linguists (see Chaski 2001, McMenamin & Brengelman 2000). In the short term, if courts are not inclined to keep the documents from the jury, linguists should be permitted to testify about the dangers of drawing unwarranted conclusions.

3.2. PHONETICS AND THE PROBLEM OF SPEAKER IDENTIFICATION. There are a number of areas in which phonetic expertise might prove relevant to judicial decision making.

¹⁰ The methodology to which the court refers is from McMenamin (1993).

Deciphering or enhancing speech on tape or other types of recordings is one such area. Here, the cases have also been divided. Some courts have refused to allow linguists to testify because 'hearing is within the ability and experience of the trier of fact' (*Beech Aircraft Corp. v. United States*, 51 F.3d 834 (9th Cir. 1995)). At least one court, however, has allowed expert testimony in deciphering something that was said on a recording (*Weiss v. Glemp*, 792 F. Supp. 215 (S.D.N.Y. 1992)). Interestingly, the expert in both cases was Roger Shuy.

Our view is that phoneticians and other linguists who deal with recorded speech on a regular basis are highly qualified to enhance the sound on tapes or to offer an opinion on what is being said. When the parties are willing to offer such expert assistance, it seems absurd to leave the issue to a lay jury that has never been trained to work with tape-recorded information.

A more controversial application of phonetics is the use of what are called VOICEPRINTS, a form of spectrographic analysis, to identify a tape-recorded voice as belonging to a particular speaker (typically, the defendant in a criminal case). Most of the actual analysis is done not by linguists, but by a small group of police officers and technicians who have been trained for this specific task, and who typically have limited backgrounds in acoustics or phonetics. The main issue, however, is whether the methodology produces sufficiently reliable results. This is a critical question, because voiceprint evidence may be pivotal to a case.

During the late 1960s and throughout most of the 1970s, American jurisdictions were divided on the issue of spectrographic evidence. Many courts determined that the methodology was not accepted as reliable within the scientific community, and they would therefore not admit it. Other appellate courts reached the opposite conclusion, holding that it was within the discretion of the trial judge to admit the testimony and that—as always—it was up to the 'finder of fact' (often the jury) to decide how much weight to give it.

An influential report by the National Research Council in 1979 questioned the ability of voiceprints to produce accurate results under forensic conditions with sufficiently low rates of error (Bolt 1979). One member of the committee that wrote the report was Professor Oscar Tosi, whose earlier experimentation was influential among courts that accepted voiceprint analysis (e.g. Tosi et al. 1972).

Surprisingly enough, throughout the 1980s and 1990s the published opinions have, albeit in smaller numbers overall than before, continued to be split on the issue. As recently as 1999, the Alaska Supreme Court held that voiceprint evidence was admissible in a case involving a man accused (and later convicted) of making terrorist telephone calls (*State v. Coon*, 974 P.2d 386 (Alaska 1999)). Similar decisions have been reached during the past two decades or so by the United States Circuit Court of Appeals for the Sixth Circuit, the Seventh Circuit, a federal district court in Hawaii, the supreme courts of Ohio, Massachusetts, and Rhode Island, and a lower court in New York. But during roughly the same time, voiceprints were held inadmissible by the high courts of Arizona, Colorado, Indiana, Louisiana, and New Jersey.¹¹ Clearly, the courts are in widespread disagreement on this issue, even though many linguists have expressed serious doubts about the reliability of this approach in a forensic setting. Indeed, one phonetician has called it 'a fraud being perpetrated upon the American public and the Courts of the United States' (Hollien 1990:210).

¹¹ For a list of the cases, see footnote 60 of Rafferty (1999).

A careful reading of the cases shows that courts that employ the *Frye* standard are more likely to reject voiceprints than are those who employ the *Daubert* standard.¹² Under *Frye*, the only issue, other than relevance, is whether voiceprints are 'sufficiently established to have gained general acceptance in the particular field in which [they] belong' (293 F. at 1014). They are not. Even a cursory review of the phonetic literature demonstrates substantial controversy over their usefulness and validity as a forensic tool.¹³

In contrast, it is easier (but by no means necessary) under the *Daubert* standard to justify admitting voiceprint evidence. As the Alaska Supreme Court recently noted in *State v. Coon* (974 P.2d 386, 400–01 (Alaska 1999)), some published reports support their use. Because the philosophy of the Federal Rules, under which *Daubert* was decided, is to treat controversy by presenting both sides of an argument (rather than by excluding evidence altogether), the Alaskan court placed as much or more emphasis on studies sponsored by police officials that advocate for the use of voiceprints as it did on publications from the independent scientific community (974 P.2d at 402).

A leading treatise on scientific evidence in American law observes a certain incongruity in the debate over the admissibility of spectrographic evidence:

The refusal of some courts to admit talker identification expert evidence is an exception to the traditional receptiveness of the courts to forensic individuation techniques. Why has talker identification been treated differently? Several interconnected explanations are plausible

Numerous courts evaluating talker identification expertise were critical of witnesses testifying on behalf of the technique who were mere technicians rather than educated scientists; or whose livelihoods depended upon continued admission of the technique; or who came from a very small circle of proponents of the technique.

Another factor is that the literature of scientific talker identification, both supporting and questioning the technique, was more quantified and qualified than earlier courts had received about earlier forensic individuation techniques. This is because most of the people involved in talker identification came from fields that had a tradition of empirical testing of their ideas. Indeed, more research was available to the courts about talker identification expertise than for any forensic individuation field that preceded it. This immediately provided the courts with unusual resources with which to comprehend the shortcomings of the technique. (Faigman et al. (1997:192–93))

The authors of the treatise then observe that this creates a paradox:

All else equal, the better a field studies and critiques itself, the more skeptical the courts' impression of it is likely to be. The less well a field understands what it is doing and what the limits are on its own capabilities, the more positive an impression the courts will develop of the field. For a number of the more conventional forensic individuation techniques, there still is no tradition of self-scrutiny or a literature reporting the results of rigorous testing which can inform the courts. At least in terms of their continued acceptance by the courts, those fields have nothing to gain and much to lose by adopting a tradition of inquiry, testing, and skepticism. (Faigman et al. (1997:193, n.22))

To give just one example of the kind of evidence that Faigman and his colleagues criticize, consider the science of identifying individuals from bite marks that they leave. Although this type of evidence is routinely admitted in court, Faigman et al. observe that 'Bite mark casework does not employ quantitative data and does not result in quantitative probability estimates. The typical bite mark opinion is devoid of scientific data supporting the ultimate, subjective, conclusory opinion' (1999 Pocket Part Supplement, p. 27).

¹² See Faigman et al. (1997:190), which summarizes which courts have accepted spectrographic analysis, which ones have rejected it, and the evidentiary standards applied.

¹³ One way around the *Frye* standard is to define 'particular field' narrowly to include only those who advocate for the technology. In fact, the Alaskan court in *State v. Coon* (974 P.2d 386 (Alaska 1999)), can be accused of doing just that. This ploy has been a source of significant criticism in the American legal literature. See Faigman et al. (1997) for discussion of this device in the context of voiceprint experts.

Quite unlike bitemark analysis, forensic phonetics, it seems to us, is a vibrant and productive field that has much to contribute to the judicial process (see Hollien 1990). But, as most of the phonetics community recognizes, voiceprint evidence is currently too unreliable to allow people's freedom to depend on it, at least if not bolstered by considerable confirming evidence. As the technology becomes more sophisticated and research continues, however, the linguistics community may wish to revisit the issue.

3.3. DISCOURSE ANALYSIS. American courts have been reluctant to admit experts on discourse analysis. The cases primarily involve covertly recorded conversations between government agents and defendants who make allegedly incriminating statements. Discourse analysis of such statements has been admitted in a number of unpublished cases (Shuy 1993, 1998). But virtually every appellate court to consider the matter in a published opinion has held that a trial judge may properly exclude such testimony, as Wallace (1986) has shown in a detailed overview. Arguably, the published opinions produce a misleading record. Although most such opinions have affirmed trial courts' decisions to disallow the testimony, there are many (unreported) cases in which discourse analysis has actually been admitted.

The most recent opinion we found involved a rape trial. A key piece of evidence was a tape recording in which the defendant, according to the prosecution, admitted raping the victim. Although the procedural history is complex, the defendant denied at trial that it was his voice on the tape, but the jury apparently thought otherwise and convicted him. On appeal, he was awarded funds to hire a linguistic expert. The expert concluded that it was indeed the defendant's voice on tape, but that because the defendant appeared weak-willed and easily dominated, his comments on the tape were not probative of guilt.

The defendant then petitioned the federal courts for assistance, arguing that if he had been given funds to hire the expert earlier, he would have known better than to deny it was his voice on the tape; instead, he would have had the expert testify that his recorded statements were not an admission that he raped the woman. The Court of Appeals for the Second Circuit had little sympathy for his argument, pointing out that courts have generally not admitted testimony on 'linguistic discourse analysis' (*Tyson v. Keane*, 159 F.3d 732, 736 (2d Cir. 1998)).

The principal reason the appellate courts have affirmed the exclusion of discourse analysis is that, in their view, it has not been proven reliable or received general acceptance in the scientific community. This conclusion may result from the belief that, as one judge phrased it, discourse analysis is a 'discipline allowing [the expert] to determine the intent of the speaker in covertly recorded conversations' (*State v. Conway*, 472 A.2d 588, 608 (N.J. Super. Ct. 1984)). If the discipline is defined as a means of determining the actual intentions of a specific speaker in a tape-recorded conversation with minimal contextual cues, it is no wonder that judges find it unreliable, or at least, unproven. Perhaps the lesson to discourse analysts is that they need to be careful how they describe their expertise to lawyers and judges.

Another concern emphasized by courts is that the conversations in question generally consist of ordinary language, with which jurors are assumed to be familiar. Recall that a basis for admitting expert testimony under Rule 702 is that it can assist the jury in understanding the evidence. Some judges have suggested that discourse analysis will not promote this function. The notion here seems to be: 'Why do we need a language expert? We have twelve jurors who all speak English. Let them decide'. Indeed, a few

courts have suggested that allowing discourse analysis of the meaning of ordinary conversations would not only be unhelpful to jurors, but might actually confuse them.¹⁴

Courts are likely to remain reluctant to admit discourse analysis when it is offered as explaining the 'ultimate issue' of what a speaker meant or what the speaker's intentions were. At the same time, it seems to us that there is a legitimate, but perhaps more limited role for discourse analysis in the legal system. Linguistic experts can assist jurors to understand a recorded text, for instance, by pointing out who is raising which topics. Linguists can also point out a pattern of discourse markers that would have otherwise gone unnoticed, or inform jurors about the nature of Gricean implicature in appropriate cases. Once the jurors are aware of this information, they will be on the same footing as the expert (more or less), and able to draw their own inferences based on their intuitions as enhanced by the linguistic analysis that the expert has presented.

We believe that if discourse analysis is offered on such terms, more judges would be—or should be—inclined to admit it. In fact, Shuy (1993, 1998) reports that his testimony was accepted in a number of cases in which discourse analysis was used in just this way. Given the evidentiary standards of both *Frye* and *Daubert*, the legal system is not likely to accept stronger inferences from linguists based on discourse analysis unless they are backed up by empirical studies. The growing use of corpora will enhance the likelihood of discourse analysis being admitted, both by increasing its perceived reliability and by presenting jurors with information that may not be intuitively evident.

3.4. THE MEANING OF CONTRACTS AND STATUTES. The same considerations apply generally to linguistic experts offered to testify on the meaning of legal texts like statutes, insurance policies, and contracts. (See Solan 1998, 1999 for more detailed discussion). If linguists act as guides through difficult passages, using linguistic analysis to explain how it is that various interpretations are available, their testimony is more likely to be accepted by courts than if they attempt to tell judges what a legal text means.

Courts have given linguistic expertise on meaning a mixed reception. In the American legal system, judges—not jurors—interpret legal documents, at least initially. Judges are the only official interpreters of statutes. As for contracts and insurance policies, if the judge finds them to be ambiguous, then it is up to the jury to decide which of the available meanings was the intended one. Some courts have held that since interpretation is a legal matter and linguists are not lawyers, linguists cannot have much to contribute. (See *National Automobile and Cas. Ins. Co. v. Stewart*, 272 Cal. Rptr. 625 (Cal. Ct. App. 1990)). In contrast, other courts have admitted linguists as experts on meaning, especially in cases involving the interpretation of statutes. (See *Louisiana v. Azar*, 535 So. 2d 441 (3d Cir. 1988)). Other courts are worried about usurping the role of the jury. For example, courts are suspicious of linguists being called in libel cases to tell jurors what the defendant meant by an allegedly defamatory statement, although a few have allowed it (see Solan 1999).

Again, the problem here seems to be the extent to which linguistic testimony can help the legal system. In cases involving complex language about which there is understandable disagreement between the parties, linguists can serve a role by acting as tour guides, walking the judge or jury through the disputed language, and explaining how the

¹⁴ *United States v. Kupau*, 781 F.2d 740 (9th Cir.), cert. denied, 479 U.S. 823 (1986); *United States v. Valverde*, 846 F.2d 513 (8th Cir. 1988).

disputed language is an example of well-studied linguistic phenomena. The linguist's ultimate interpretation is not very important, and sometimes should not be given at all. Judges and jurors can use their own intuitions as native speakers. But if the linguist can help the players in the legal system understand in a systematic way the source of these intuitions, she can help jurors to structure their deliberations, and judges to structure their opinions. These services will not be needed frequently. Most often, people can decide on the relevant range of available interpretations of a document without expert assistance. But there should be an occasional role for linguists in these circumstances that does not usurp the role of judge or jury. Many of the cases in which linguistic expertise on meaning has been accepted use linguistic knowledge in just this way. Moreover, the literature on syntax and semantics is so rich that there should rarely be any question about linguistic expertise meeting evidentiary standards under *Frye* or *Daubert*.

3.5. POLITICS AND THE COMPREHENSIBILITY OF JURY INSTRUCTIONS. Finally, let us consider cases that deal with the comprehensibility of jury instructions. Much research, beginning with a seminal study by Robert and Veda Charrow (1979), has shown that the standardized jury instructions typically used in the various American state and federal jurisdictions are quite difficult for many jurors to process. California, for instance, has an instruction on how to evaluate the testimony of witnesses, solemnly admonishing the jurors that 'failure of recollection is a common experience, and innocent misrecollection is not uncommon'. The last five words contain no fewer than three negative elements. Even more complex is the instruction that a lawyer's questions to a witness are not evidence, and that therefore jurors must 'never speculate to be true any insinuation suggested by a question asked a witness' (Charrow and Charrow 1979: 1344–45).

One would think that lawyers would consider hiring a linguist or cognitive psychologist to investigate the ability of jurors to understand their charge, especially in a case where the instructions are unusually significant. Oddly, lawyers rarely do so, though this is just what happened in two capital murder cases in Illinois, discussed in Tiersma 1995. We have already briefly mentioned the first of these cases, *Free v. Peters*, in which the trial court gave substantial credence to expert testimony that Free's jury did not properly understand its instructions on the role of mitigating evidence. A closely related case involved a mass murderer named John Wayne Gacy, who attempted to use the same evidence to overturn his own death verdict.

Illinois, like many other American states, requires that after a defendant is found guilty in a capital case, the jury must weigh or balance 'aggravating' factors against 'mitigating' factors. The relevant statute requires that

If the jury determines unanimously that there are no mitigating factors sufficient to preclude the imposition of the death sentence, the court shall sentence the defendant to death.

Unless the jury unanimously finds that there are no mitigating factors sufficient to preclude the imposition of the death sentence the court shall sentence the defendant to a term of imprisonment under Chapter V of the Unified Code of Corrections. (Ill. Rev. Stat. ch. 38, para. 9-1)

This statutory language was read, almost verbatim, to both the Free and Gacy juries when they had to decide whether these men should die or spend the rest of their lives in prison. Both juries voted for death.

In separate lawsuits, Free and Gacy challenged the imposition of the death penalty in federal court. They invoked a juror comprehension study conducted by psychologist Hans Zeisel, as well as testimony by a linguist (see Levi 1993). The study and related

testimony demonstrated that jurors who received Illinois's death penalty jury instructions did not adequately understand the role of mitigation and aggravation. Even a cursory glance at the language of the statute reveals problems with multiple negation, a relatively unusual word (*preclude*), lack of clarity about when unanimity is required, and phrasing that suggests that a death verdict is the desired outcome. As mentioned, the trial court judge paid serious attention to the linguistic and other expert evidence.

In Gacy's case the jury's difficulty in understanding the convoluted Illinois death penalty instruction was compounded by what Court of Appeals Judge Frank Easterbrook later called 'a slip of the judicial tongue'. He summarized what happened as follows:

The jurors had this instruction, like the others in the three-page charge, during their deliberations. Unfortunately, Judge Garippo did not read the instruction to the jury as written—or at least the court reporter did not take down the same words that appear in the written instructions. The transcript has it that the second sentence of this instruction was delivered as: 'If, after your deliberations, you unanimously conclude there are mitigating factors sufficient to preclude the imposition of the death penalty, you must sign the verdict form directing a sentence of imprisonment'. (*Gacy v. Welborn*, 994 F.2d 305, 307 (7th Cir. 1993))

The trial court thus erred in instructing the jury that there must be unanimity about mitigation to justify a sentence of life imprisonment. Just the opposite is true as a matter of law: a single juror who believes that something about the defendant or the crime is a mitigating factor may vote against death on that basis, requiring the court to sentence the defendant to imprisonment (usually for life).

Despite the evidence of confusion, Gacy's appeal of his death sentence was rejected by the Seventh Circuit Court of Appeals. An opinion written by Judge Easterbrook admitted that 'the instruction did not give the jury the whole truth', but held that closing arguments by the lawyers and a written copy of the instruction remedied any misconceptions. As to the Zeisel study, the court admitted that the use of legalese in instructions had an 'inevitable adverse affect' on the jury's comprehension, but invoked the traditional legal presumption that jurors understand and follow their instructions. This presumption, the court emphasized, is not a 'bursting bubble applicable only in the lack of better evidence'. No, this presumption is a 'rule of law' (994 F.2d at 312–313). Gacy has since been executed.

When Free's case reached the Seventh Circuit, an opinion by Judge Posner likewise rejected the comprehension research, deeming it methodologically flawed, and affirmed the original death sentence (*United States ex rel. Free v. Peters*, 12 F.3d 700 (1994)). Free has also been executed.

These judicial reactions reflect not just legal, but systemic and political concerns. From the perspective of the criminal justice system, judges fear that invalidating a conviction because the jury did not understand its instructions would provide a basis for appeal in countless other cases, because jury instructions in general are not all that understandable. Similar concerns motivated the Supreme Court's opinion in *McCleskey v. Kemp* (481 U.S. 279 (1987)). There, the Court decided that statistical evidence gathered by a well-known social scientist concerning racial prejudice in meting out the death penalty should not be given weight by the courts. In response to the argument that death penalty cases are special, the Court said that 'The Eighth Amendment is not limited in application to capital punishment, but applies to all penalties. . . . Thus, if we accepted McCleskey's claim that racial bias has impermissibly tainted the capital sentencing decision, we could soon be faced with similar claims as to other types of penalty' (481 U.S. at 314–17).

This moment of candor reflects a genuine concern: if new research can be used to question the validity of a certain type of legal decision making, when does the questioning end? Judges fear that they may be opening a Pandora's box, the end result of which could be the reversal of countless jury verdicts, undermining public confidence in the criminal justice system and the jury itself.

The *Gacy* and *Free* cases never reached the nation's highest court. Recently, however, a set of capital cases from Virginia came before the Supreme Court, providing it with an opportunity to consider the importance of having a jury properly understand its role in the justice system, especially when life itself is at stake. In *Buchanan v. Angelone* (522 U.S. 269 (1998)), Buchanan had been convicted of murder. He was sentenced to death despite the fact that his jury received a poorly drafted instruction which, in our view, failed to properly apprise them of the role of mitigating evidence. As noted above, such evidence consists of reasons that a jury might have mercy on a defendant and is therefore an extremely important consideration when a capital jury is required to decide whether the defendant should be sentenced to life imprisonment or death. Nonetheless, the Court had little sympathy for the arguments of Buchanan's lawyers. To the majority of justices—who are, after all, prominent representatives of the legal system—the instruction seemed perfectly comprehensible.

A year later the Supreme Court accepted another case from Virginia, *Weeks v. Angelone* (102 S. Ct. 727 (2000)). Weeks had been condemned to death by a jury that received the same standardized instruction as did Buchanan, but with one important difference. In the *Weeks* case, the jury sent the judge a question during its deliberations that revealed that they were unsure about the role of mitigation. The judge, as is common in these situations, refused to elaborate on the law and simply referred them back to their original instructions.

One might suppose that a jury's question is compelling evidence of lack of understanding, but the Supreme Court thought otherwise. Although the vote was closer than in the *Buchanan* case, the justices brought to bear the familiar rules that a jury is 'presumed' to follow its instructions, and added that it is likewise 'presumed' to understand the judge's answer to their questions. The Court upheld Weeks's death sentence, and he has since been executed.

To our knowledge, no linguists were involved in either *Buchanan* or *Weeks*. Subsequently, however, a group of researchers showed that the jury instruction used in both of those cases was indeed seriously misunderstood by a substantial number of subjects (Garvey et al. 2000), just as the dissenting justices predicted. Yet it seems unlikely that such research would have made a difference, even if it had been available to the Court when it pondered its decision.

Particularly when the issue is the death penalty, still widely supported by the American public, the politics are palpable. Many federal judges have recently expressed the view that appeals by state death penalty inmates to federal courts (generally using the venerable writ of habeas corpus) are nothing more than an eleventh-hour attempt to delay their executions. That, apparently, is how the panels of judges deciding the *Free* and *Gacy* cases interpreted the Zeisel study: not as evidence of the linguistic inadequacies of a critical jury instruction, but as a final straw to be grasped at by desperate men. Viewed in that light, the outcome was foreordained.

4. CONCLUSION. While we end on this pessimistic note, it is interesting to see just where courts begin to appear threatened by linguistic testimony. Courts will be less likely to accept linguistic expertise when it challenges long-standing institutional roles.

The jury may be the most important of these, which further explains the reluctance of courts to allow experts in discourse analysis to draw inferences relating to a speaker's intent. Such inferences are a classic jury function in the American legal system.

In our view, courts ought to allow linguists to explain to juries relatively noncontroversial aspects of how conversations operate, even if they insist on leaving ultimate questions of speakers' intentions entirely to the jury. Similarly, we believe that courts should allow linguistic experts to comment on the range of meanings of statutes and contracts when that testimony can be helpful in understanding the evidence and structuring the debate between the parties.

We also believe that the law concerning the use of experts in both voice identification and author identification is in serious need of improvement. Here, the linguistic and legal communities might work together.

Despite these areas of contention, linguists are generally welcome in American courts when it appears that their testimony is based on sound research and will be helpful to the judge or jury. As the legal profession and linguists both learn what type of language expertise is most useful to jurors, and as linguists bolster the validity of their opinions with corpus-based data, we expect this trend to continue.

REFERENCES

- BOLT, RICHARD H. et al. 1979. On the theory and practice of voice identification (Report of the Committee on Evaluation of Sound Spectrograms, Assembly of Behavioral and Social Sciences, National Research Council). Washington, DC: National Academy of Sciences.
- BRESNAN, JOAN. 1978. A realistic transformational grammar. *Linguistic theory and psychological reality*, ed. by M. Halle, J. Bresnan, and G. A. Miller, 1–59. Cambridge, MA: MIT Press.
- CHARROW, ROBERT, and VEDA CHARROW. 1979. Making legal language understandable: a psycholinguistic study of jury instructions. *Columbia Law Review* 79:1306–73.
- CHASKI, CAROLE E. 2001. Empirical evaluations of language-based author identification techniques. *Forensic Linguistics* 8:1–65.
- COTTERILL, JANET. 2002. *Language in the legal process*. Hampshire, UK: Palgrave, to appear.
- CULICOVER, PETER. 1997. *Principles and parameters: An introduction to syntactic theory*. Oxford: Oxford University Press.
- FAIGMAN, DAVID L.; DAVID H. KAY; MICHAEL J. SAKS; and JOSEPH SANDERS. 1997. *Modern scientific evidence*, vol. 2. St. Paul, MN: West Publishing Company.
- FINEGAN, EDWARD. 1990. Variation in linguists' analysis of author identification. *American Speech* 65:334–40.
- FOSTER, DON. 2000. *Author unknown: On the trail of Anonymous*. New York: Henry Holt.
- GARVEY, STEPHEN; SHERI LYNN JOHNSON; and PAUL MARCUS. 2000. Correcting deadly confusion: Responding to jury inquiries in capital cases. *Cornell Law Review* 85:627–55.
- GIBBONS, JOHN (ed.). 1994. *Language and the law*. London: Longman.
- HOLLIEN, HARRY. 1990. *The acoustics of crime: The new science of forensic phonetics*. New York: Plenum.
- HUBER, PETER W. 1991. *Galileo's revenge: Junk science in the courtroom*. New York: Basic Books.
- LABOV, WILLIAM, and WENDELL A. HARRIS. 1994. Addressing social issues through linguistic evidence. *Language and the law*, ed. by John Gibbons, 265–305. London: Longman.
- LEVI, JUDITH N. 1993. Evaluating jury comprehension of Illinois capital sentencing instructions. *American Speech* 68:20–49.
- LEVI, JUDITH N. 1994. Language as evidence: The linguist as expert witness in North American courts. *Forensic Linguistics* 1:1–26.
- LEVI, JUDITH N., and ANNE GRAFFAM WALKER. 1990. *Language in the judicial process*. New York: Plenum Press.
- MCCARTHY, J. T. 1992. *Trademarks and unfair competition*, 3rd edn. New York: Clark Boardman Callaghan.

- McMENAMIN, GERALD R. 1993. *Forensic stylistics*. Amsterdam: Elsevier.
- McMENAMIN, GERALD R., and FRED H. BRENGELMAN. 2000. Two independent studies of the same questioned-authorship case. Paper presented at the Georgetown University Round Table on Languages and Linguistics.
- RAFFERTY, LISA. 1999. Anything you say can and will be used against you: Spectrographic evidence in criminal cases. *American Criminal Law Review* 36.291–311.
- RIEBER, ROBERT, and WILLIAM STEWART (eds.). 1990. The language scientist as expert in the legal setting. New York: *Annals of the New York Academy of Science* 606.
- SHUY, ROGER W. 1993. *Language crimes: The use and abuse of language evidence in the courtroom*. Cambridge, MA: Blackwell.
- SHUY, ROGER W. 1998. *The language of confession, interrogation and deception*. Thousand Oaks, CA: Sage.
- SOLAN, LAWRENCE M. 1998. Linguistic experts as semantic tour guides. *Forensic Linguistics* 5.87–106.
- SOLAN, LAWRENCE M. 1999. Can the legal system use experts in meaning? *Tennessee Law Review* 66.1167–99.
- TIERSMA, PETER M. 1995. Dictionaries and death: Do capital jurors understand mitigation? *Utah Law Review* 1995.1–49.
- TOSI, OSCAR; HERBERT OYER; WILLIAM LASHBROOK; CHARLES PEDREY; JULIE NICOL; and ERNEST NASH. 1972. Experiment on voice identification. *Journal of the Acoustical Society of America* 51:2030–43.
- WALLACE, WILLIAM D. 1986. The admissibility of expert testimony on the discourse analysis of recorded conversations. *University of Florida Law Review* 38.69–115.
- WEINSTEIN, JACK, and MARGARET BERGER. 1998. *Weinstein's federal evidence*. New York: Matthew Bender.

Tiersma
Loyola Law School
919 S. Albany St.
Los Angeles, CA 90015
[Peter.Tiersma@lls.edu]

[Received 14 July 2000;
accepted 14 March 2001]

Solan
Brooklyn Law School
250 Joralemon St. Rm. 715M
Brooklyn, NY 11201
[lsolan@brooklaw.edu]