"Language and Law (forensic linguistics)" (in press) In Aronoff, Mark and Janie Rees-Miller, eds., *The Handbook of Linguistics* (new revised and updated version of my 2001 chapter).
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Although many people commonly think of applied linguistics as language learning, teaching, and testing, a growing number of linguists in recent years have been applying linguistic principles, theory and research to many other areas of life, such as medical communication, advertising, and the intersection of law and language. This isn't surprising because it's hard to imagine any area of human existence where linguistics cannot be applied. Over the years the legal arena had received attention from anthropologists, psychologists, sociologists and political scientists, but now linguists are applying their field's knowledge to such areas as statutory law and interpretation, voice and authorship identification, jury instructions, the asymmetry of power in courtroom exchanges, lawyer-client communication, police interrogation practices, contract disputes, legal discourse, defamation, trademark infringement, courtroom interpretation and translation, copyright disputes, discrimination, commercial warning messages, and various types of criminal charges such as perjury, bribery, solicitation, money laundering, threatening, and fraud. Virtually all of such cases involve written or spoken language evidence, making linguistic analysis very relevant.

 A good case could be made for calling the use of linguistics in the

legal arena *applied linguistics*, but the term, *forensic linguistics* began to be used to cover this area in the eighties and by now it appears to be the common name for the entire area of linguistic study, no matter what type of involvement. By the nineties, forensic linguistics had established its own academic organization, The International Association of Forensic Linguistics, its own journal, *The International Journal of Speech, Language and Law* (originally named *Forensic Linguistics*), a rapidly growing number of books and articles, and an increasing number of linguists from all over the world who do this type of work. Some would rather refer to this area as *linguistics and law* while others prefer the even simpler label, *linguistics*. But since *forensic* is commonly described as dealing with the application of scientific knowledge to other areas, that name seems to be accepted.

We can tell that a field is beginning to mature when general introductions start to be published. Forensic linguistics now has several general introductions available. Some focus on parts of the entire field (McMenamin 2002; Olsson 2004) while others have a somewhat broader scope (Gibbons 2003; Coulthard & Johnson 2007). Currently there are also two handbooks covering language and the law (Coulthard & Johnson 2010 and Tiersma & Solan (2011).

So what do forensic linguists do? As in linguistics as a whole, linguists who relate language to law have two major avenues in which to do their work: research and practice. Those who choose

the avenue of research tend to analyze such things as the language and interpretation of statutes, the written and spoken language of judges and attorneys in the context of trials and hearings, and the language of police interrogations and the subsequent confessions of suspects. Those who choose the avenue of practice leap into the frying pan of actual court cases, analyzing the language evidence of individual criminal and civil court cases, either as consultant advisors to attorneys or as expert witnesses at trials.

Forensic linguistic practitioners respond to the requests of attorneys to help them with their law cases, including civil cases such as trademark infringement, product liability, copyright infringement, and discrimination relating to age, race, and gender. They are also asked to work on criminal cases of many kinds, such as bribery, money laundering, deceptive trade practices, threatening, perjury, sexual misconduct, and illegal solicitation of various types. Some cases can be either civil or criminal, depending on the specific charges, such as the ones involving speaker identification and authorship identification. The following are examples of how linguists practice in civil and criminal cases as well as the linguistic research work they do.

1. Civil Cases

Trademark Infringement

One company holding a trademark may feel that another

company's trade name is too much like its own. The more generic or descriptive the name, such as *Raisin Bran* or *Beer Nuts*, the less likely such a name can be protected against use by other companies. The more unique or fanciful the name, such as the coined words, *Kodak* or *Xerox*, the more likely such protection will apply.

 Mostly it's the trade names that fall between descriptive and fanciful categories that find their way to litigation. The law refers to such categories as "arbitrary," and "suggestive." Arbitrary trade names are non-fanciful words in common use but, when used with goods and services, do not suggest nor describe the ingredients, quality or character of those goods or services. The ordinary meaning of the word is applied to those goods in an arbitrary and non-descriptive sense.

McCarthy's *Trademarks and Unfair Competition* (1984) cites a case law ruling about the trade name, *V-8* (vegetable cocktail), that illustrates how courts define arbitrary trade names:

> By repeatedly advertising the fact that its cocktail is made
> from the combined juices of eight vegetables, the plaintiff
> has undoubtedly taught the purchasing public that *V-8* on a
> tin can means such a cocktail. Except for this association, we
> think, no one could reasonably be expected to know that *V-8*
> designated a vegetable juice cocktail, or any other particular
> thing for that matter, unless it be something so described by

both shape and number, like an eight cylinder engine, for instance, having cylinder blocks set at an acute angle to each other.

Standard Brands Inc. v. Smidler (1945 CA2 NY) F2d 34, 66 USPQ 337.

McCarthy also cites how case law ruled that *Ivory* (soap) is arbitrary:

> …the ordinary meaning is applied to the goods in "a totally arbitrary and non-descriptive sense. Ivory soap is not made of ivory, *Old Crow* (whiskey) is not distilled from old crows, and *Royal* (baking powder) is not used exclusively by royalty.
> *Stork Restaurant v. Sahati (1948 CA9 Cal 166 F2d 348, 76 USPQ 374.*

Suggestive trade names also are words in common use but they don't describe the product's purpose or function. Instead they suggest some quality not indicated by the name itself. The trade names, *Camel* (cigarettes), *Shell* (gasoline), and *Arm and Hammer* (baking soda) are commonly cited as illustrations of suggestive trade names.

The burden of proof rests on the allegedly offended party to show that the other party's name looks like, sounds like, and means the same as their own. To a linguist, "sounds like" obviously suggests

phonological analysis, "looks like" suggests graphology and semiotic analysis, and "means the same" suggests semantic analysis (Shuy 2002: Butters 2007, 2008). Another type of trademark case involves trademark dilution, a concept that even trademark lawyers have difficulty defining. To linguists, "dilution" suggests linguistic analysis of language perception and language changes over time, among other things (Butters 2007).

Product Liability

 Forensic linguists are also retained in product liability lawsuits (Dumas 1990; Shuy 1990, 2008; Cushing 1994; Tiersma 2002). It may seem surprising that linguistics has anything to do with a complaint that a product has caused injury to a consumer. But suppose an attorney has a lawsuit in which a person has suffered physical harm that was alleged to be caused by inadequate or misleading usage instructions or by the package warnings given about the product itself. A linguist is called upon to analyze the language of the warning or usage message to determine whether or not they are sufficiently clear, unambiguous, or the most optimally effective way to guide the user to avoid the dangers or that they follow the wording guidelines of the relevant regulatory agency.

For example, does a manufacturer meet the U.S. Food and Drug Administration's required warning to show that "tampons are associated with Toxic Shock Syndrome" when it labels its package insert warning with the words, "Important Information About

Toxic Shock Syndrome (TSS)"?

Does "important information about" meet the FDA requirement that the product is "associated with" that danger? Does the fact that the warning finally makes such an association in the middle of the warning portion satisfy the government regulation that this warning must appear "prominently" and in "terms understandable by the user?" Does the fact that the warning portion of the message is written in complex sentences averaging 19 words per sentence while the "instructions for how to use" section is written in simple sentences averaging 9.4 words per sentence suggest that the writers really knew how to write more readable sentences but chose not to when they wrote the "warning" section? (Shuy 1990, 2008)

No linguist, of course, can get into the minds of either the warning writer or the consumer who reads it. That is, the linguist cannot know the intentions of the writer or the actual comprehension of the reader. But the linguist, calling on knowledge of discourse analysis, semantics, syntax, and pragmatics, can determine the extent to which the message was clear and unambiguous and point out the possible meanings that the message presents.

Contract disputes

Contracts of all types, including insurance policies, provide a fruitful area for linguistic analysis. To most readers, contract wording may seem complex, needlessly convoluted, and riddled

with jargon. Lawyers may have good reasons for using such language but if contracts are so carefully constructed, one has to wonder why is it that there are so many lawsuits growing out of them. Contracts hold interest to linguists because they consist of the speech acts of promises made in exchange for promises of performance or actions. They also contain conditions, some of which are linguistically well formed and others which are not. The text of contracts offers the linguist an opportunity to determine the range of possible meanings that the contract reveals (Tiersma 2002; Solan 2004; Shuy 2008).

For example, one insurance policy contained a common exclusions section that said, "This policy does not cover any loss covered by or resulting from…sickness or disease, except pyogenic infections which occur through an accidental cut or wound."

This policyholder received relatively uncomplicated surgery on his retina to scrape off a macular pucker that had developed. Although the chances of his getting a pyogenic infection were miniscule, disaster happened for him when, after his surgery, he became blind in one eye. Since his surgery was not an "accident," he was sure that his policy covered his condition but he soon discovered that the insurance company interpreted the above exclusion differently.

The sticking point was the noun phrase, "accidental cut or wound," and a legal battle took place over the use of "or" in this sentence. The company said that "accidental cut or wound," taken as a

whole, refers to events that occur outside of the surgical context and therefore this phrase excluded all surgical procedures from liability. The policyholder agreed that "accidental cut" was an event outside the surgical context but that "wound" included surgery. He reasoned that surgeons "cut" when they perform the first step in the surgery, but after the incision is made, it is referred to thereafter as a "wound," even by medical personnel. So the battle was over one of those little words in English that are sometimes difficult to define, "or" being one of them.

"Or" has three major meanings in English:
1. alternatives with disjunctive elements, such as "You can have salad or soup with your meal," meaning that you are available to only one of the alternatives.
2. synonyms for the same elements, such as "Buffalo used to roam free or unfettered."
3. a two-way indefinite choice between separate elements, as in "He works out in the gym two or three times a week."

The problem was how to discover which meaning of "or" applied here. The insurer said it meant that "cut" and "wound" were synonyms, both of which referred to accidents. The policyholder said "or" meant that there was a choice between two separate elements.

Support for the policyholder's view were found in eleven of that policy's uses "or" that appeared in the exceptions section before

this "accidental cut or wound" phrase. In all eleven instances "or" was used clearly and unambiguously as a disjunct. This consistent use of "or" as a disjunct enabled and encouraged that policy holder to predict and understand from the discourse context that this last use of "or" was also a disjunct that contained two separate and different elements.

In addition, in English constructions containing two scope bearing elements, the one that comes first has scope over that which follows. This initially negativized expression, "except pyogenic infection which occur through an accidental cut or wound," has two scope bearing elements, "through," and "accidental." "Through" has scope over the following noun phrase, " an accidental cut or wound." But, as the policy holder argued, the adjective, "accidental," does not have scope over "wound" because the expression was a negativized by "except." This meant that "wound" is not under the scope of "accidental," because the second scope-bearing element, "accidental" has scope over only "cut," the noun it immediately modifies. The negativizer, "except," heads the construction and has scope over what comes after it, conveying the meaning of both "through an accidental cut" and "through a wound." The policy writer could have avoided this problem by saying "through either an accidental cut or an accidental wound."

Speaker Identification

The identification of speakers (usually on audio-recordings) can be important in both criminal and civil cases. In civil cases the recording might be made surreptitiously by someone in a board meeting, for example. When there are many speakers involved, sometimes their identification can be difficult to determine. Voice identification analysis by forensic linguists also can be important in helping identify senders of threats and hate messages.

Linguists have been used by attorneys in matters of voice identification perhaps longer than in most other areas of legal dispute (Baldwin & French 1990; Hollien 1990, 2002; Rose 2002). For example, suppose a caller leaves a threatening or hate message on an answering machine and the receiver of this message then takes the recording to an attorney or to a law enforcement agency. A linguist may be called upon to try to help identify the speaker, using only the characteristics of that voice to compare with tape recordings of voices of various potential suspects. If the tapes are of sufficient quality, spectographic analyis is possible. If not, the linguist may rely on training and skills in phonetics to make the comparison.

Several problems with such analysis have been posed. For one thing, spectographic analysis is not allowed in some jurisdictions. But even when it is allowed, it often has the suspects read the words in the original phone message aloud in order to produce exactly comparable words for analysis. Some argue that a reading voice is not the same as a talking voice and that taking words out

of their normal context distorts the comparison. Others argue that the readers, having been alerted to their status as suspects, may try to alter their normal speech patterns. There also has been considerable complaint that those who do this work employ a wide array of methods that lack evaluation and validation. On the other hand, juries tend to be more impressed with an analysis based on electronic equipment rather than on an individual linguist's phonetic judgment, no matter how expert that linguist might be.

In many voice identification cases, linguists use both spectographic and articulatory phonetic expertise to show that suspects were or were not the suspected speakers. For example, in one such case, the vowels of a suspect were shown to be characteristic of an entirely different dialect area than those of the person on the message machine tape, resulting in the suspect's acquittal. In this case, spectographic analysis was used to support the linguistic expert's skills in sociolinguistic variability and auditory phonetics (Labov 1988).

Authorship

In many cases written threats and hate messages are the evidence the law enforcement agencies process every year, often calling on the expertise of psychologists to provide what they call a "psychological profile" of the person who sent the message. The U.S. Federal Bureau of Investigation has a profiling unit at its Quantico, Virginia academy. It is only recently, however, that this

agency has begun to call on linguists to add the dimension of linguistic profiling to their psychological analyses. Such profiling has two parts. Calling on their knowledge of language indicators of such things as regional and social dialect, age, gender, education, and occupation, linguists analyze documents for broad clues to the possible identity of the writer (Solan & Tiersma 2004). Linguists also use stylistic, syntatatic, and corpus linguistics analyses of such documents, usually by comparing the writers' style and syntax with that of other documents written by same suspect or other candidates (McMennamin 1993; 2002; Chaski 2001; Coulthard 2004; Olsson 2004; Kniffka 2007). Such linguistic analysis centers on a writer's habitual language features over which that writer is thought to have little or no conscious awareness or control, such as patterns of clause embedding, parallel structures, mechanical errors, punctuation patterns, discourse features and organization, and print features such as underlining, bolding or italicizing, some of which may suggest a writer's idiolect.

One example of this occurred when female physician and director of a woman's clinic in Gary Indiana complained to the police that she had received three threat messages informing her that her clinic would be bombed. Baffled, the police called in the FBI. When the FBI agents also got nowhere, they called on a linguist to help them. He asked all ten employees of the clinic, including the director, to write a detailed account of everything they did on the day of the most recent bomb threat. He then compared these unsigned

documents with the three threat messages.

The threat messages contained expressions such as, "She will finally the seriousness of the problem recognize," "I will not give warning," "You can be transferred to better position," and "If I address it her." These and other expressions suggested the influence of Hindi-Urdu on the English used by the writer. Such a speaker might be expected to place the verb at the end of the English sentence and omit articles and pronouns. The linguist also noted other language expressions, such as "I will take the proper course" and "she was in hospital at the time," which suggested a writer who was educated under the influence of British English. Even though these threat letters were written in several different handwriting styles, apparently in an effort to disguise the writer's identity, the defining characteristics of a Hindi-Urdu and British background were used by the linguist to identify the culprit as likely to be a native Pakistani. Oddly enough, only the director's writing sample contained these same features. When confronted with this analysis, the physician/director admitted that she was the actual author of the threats. Now the FBI was baffled again, for why would the director write these letters to herself? Eventually she explained that her husband had failed his medical license examinations in California. She thought the threat messages would be a good excuse for her to close her practice and go home to help him. Because no crime had been committed, nobody was ever charged, of course. But the case was solved just the same.

It should be pointed out that linguistic profiling and authorship analysis have been most effectively used to narrow down suspect lists rather than to positively identify a specific suspect at trial. This is not to say that such positive identification is impossible but, rather that the small amount of data available for the linguist to use, the potential for language variability, the frequent dissimilarity of the genre, register, and size of the texts, and paucity of useful comparison data can often severely impact any helpful analysis.

Discrimination

Accusations of discriminatory practice take place primarily in the areas of corporate and business behavior as well as in certain law enforcement practices in which officers of the law or, in some cases even whole police departments, have been accused of discriminatory racial profiling. Beginning in the 1960s, U.S. legislation prohibited racial discrimination and since that time, further legislation has prohibited discrimination based on age, employment, handicaps, national origin, religion, language and sex.

For example, certain real estate businesses have been shown to discriminate against potential customers who phone to inquire about available homes or apartments to purchase or rent. Black callers were steered to predominantly black residential areas and away from predominately white areas (Baugh 2007; Shuy 2008). These calls were tape-recorded and analyzed by linguists, who

called on their knowledge of research on the phonetics and grammar of Vernacular African American English to assist prosecutors in their racial discrimination cases against the real estate companies.

Age discrimination, sometimes practiced by corporations as they try to get older employees to leave their companies, is also a fruitful area for forensic linguists. In one such case, a mid-level executive in his fifties was terminated despite his favorable periodic company evaluations. Through time-consuming analysis of hundreds of media articles about that company and its top executives as well the published speeches of the president of that company, a linguist isolated quotations of stereotyped age discrimination by that company in its hiring and firing processes. Even though no specific discrimination evidence was found relating to the specific employee who brought the lawsuit against the company, these documents provided sufficient basis to show that the company's policy evidenced a definite positive bias in favor of younger employees and a considerable number of negative stereotypes of older ones (Shuy 2008).

Copyright infringement and plagiarism

Copyright laws are neither simple nor precise but the general idea is to protect the originator's ideas, concepts, principles, procedures, and methods of operation from being borrowed, copied and used by others as their own. The laws consist of a somewhat vague rule

of reason that takes into consideration such things as the extent of the borrower's use, the purpose of that use, and the effect of that use on the market of the copyrighted work. Most copyright cases involve the legal concepts of proportion, substantiality, originality, and substantial similarity, all of which are fairly difficult to define. Some borrowings fall under the complex doctrine of fair use, which allows a second writer to use the original for commentary, criticism, scholarship, or parody. But even the extent to which this can be done is hard to pin down and define.

So far at least, there have been relatively few reports by linguists about their work on copyright infringement cases. One might expect more linguistic activity in this area, since it requires the comparison of texts with each other, particularly in disputes about what constitutes substantial similarity and how the expression of an idea is defined and executed.

A potentially useful linguistic analysis in copyright infringement cases would compare the way the borrower uses the sounds (represented by orthography), affixes, words, phrases, clauses, sentences, speech acts, and discourse structure of the copyrighted material. Orthographic representations such as punctuation practices may also sometimes prove diagnostic. On the whole, however, sounds and affixes are not the most fruitful units to measure, because their frequencies and inventories are so large and mutually available. Other than when there are obvious lexical or affix substitutions, individual words often also are not the best

indicators of borrowing, except as they occur in the larger context of phrases, clauses, or sentences. For example, if the original of two texts about how to save on a car's gasoline consumption said, "Don't ride the clutch to keep your car standing still on an incline" and the later published text said, "Don't ride the clutch to keep your car at a standstill on hills," a reasonably good case could be made for borrowing that occurs at the levels of both syntax and lexicon (Shuy 2008).

Some borrowers do little more than to use lexical substitutions, such as "harm" for "damage," or grammatical variations that substitute a singular for a plural noun. But it would seem obvious that other levels beside syntax and lexicon could be used in analyzing copyright evidence. From discourse analysis, for example, one might consider the comparison of topic sequencing as a possibly useful measure. And from speech act theory, one might compare the speech acts used in both texts, as well the patterned sequences of those speech acts in order to compare similarities or differences.

Linguists have been more active in the copyright's sister area, plagiarism, particularly as it occurs in the academic context. Plagiarism has characteristics that are very similar to those found in copyright disputes (Olsson 2004; Coulthard and Johnson 2007). However, in the U.S. at least, plagiarism is more a moral issue than a legal one. As a result, plagiarists in the academic context are punished outside of the legal system.

Defamation

Since people sometimes use language to defame each other, laws have been created to regulate libel (written defamation) and slander (spoken defamation), although it wasn't always this way. In previous centuries, angry men who felt insulted and defamed settled their differences in bloody duels. Today's defamation laws have replaced swords and pistols with a more civilized approach, one that requires the plaintiff to show that the defamatory expression has been published, that it has the force of an untrue accusation, and that it is not couched as a mere opinion (Tiersma 1987). In most cases, if these things can be proved, the plaintiff can receive a monetary reward from the defendant.

Although anyone can sue anyone else for defamation, most defamation lawsuits are brought against the media, whose reporters (ever since the *New York Times v. Sullivan* case in 1964) have been somewhat protected against libel suits unless the plaintiff can show that the defendant's words demonstrated clear evidence of "actual malice." Linguists are skilled in language use, suggesting that definitions of actual malice might fall within their area of expertise.

Forensic linguists are trained to analyze semantics, grammatical referencing, speech acts, conveyed meaning, language clues to intentions, discourse structure and framing, and the characteristics

of malicious language. Defamation is another of the areas in which there has not been much literature describing the past experience of forensic linguists, but this paucity of activity is not likely to endure.

One example of a defamation case that made use of a forensic linguist was a case brought by a woman against a local television station and a deputy sheriff (Shuy 2010). She claimed that this station had defamed her in a three-part television news series in which she believed she was being accused as the person who actually murdered her husband. The police were baffled by that case and did not have adequate evidence to indict her for this murder, although as the deputy sheriff stated, she was the number one suspect.

More than once in these programs, the deputy sheriff stated that the woman was "the only suspect." Note his use of "the" here, rather than "a." He also said, "we don't have enough evidence to prove that she did it beyond a reasonable doubt but I think we have a lot of the reasons why." His "why" is an unfinished expression but it strongly suggests, "why she did it."

More damaging to the stations' defense, however, was the deputy sheriff's statement on the third program: "The suspect walked directly into that house, up the stairs, into the bedroom, and shot the man right between the eyes while he was sleeping." Earlier he had said the woman was the "only" suspect. Now he said that the

suspect (there was only one) shot and killed the man. Having the opinion that the woman was the only suspect is one thing but explicitly indicating that this "only" suspect was the one who committed the murder constitutes the representation of a fact, not an opinion. It was a specific accusation that she did it. Among other things, the job of the linguist in this case was to clarify discourse referencing such as this.

2. Criminal Cases

So far we've seen how forensic linguists are used in various types of civil cases, including cases that involve author or speaker identification analyses. Many criminal cases are based on written language evidence as well, including those with documentary evidence relating to such crimes as money laundering, price fixing, proprietary theft, solicitation to murder, perjury and false statements, or fraud. Some criminal cases, however, involve electronically recorded spoken language. Before the advent of tape-recording suspected targets, law enforcement had to depend on secondary evidence and eyewitness testimony, because it was not possible to capture a crime as it actually took place. Technological advances allowed law enforcement to do convert tape-recordings, creating   stronger inculpatory evidence.

These technological advances continue to be made and have opened the door to a wide range of criminal case analysis in the past half-century. Since the mid-seventies, law enforcement

agencies have used tape recorders to capture criminal activity in progress, while in perjury cases the court provides both written and spoken records that are available to be analyzed by linguists (Shuy 2011). In other criminal cases suspects are recorded with either court-authorized wiretaps placed in such a way that none of the speakers is aware they are being recorded, or having one of the speakers deliberately taping a suspect, or by using undercover agents who wear body microphones and engage suspects in face-to-face conversations. U.S. law does not require court authorization for law enforcement to make surreptitious body mike recordings. American laws regarding surreptitious telephone taping vary between jurisdictions, some requiring the consent of only one of the parties (obviously, the one doing the taping) while other jurisdictions prohibit the practice altogether unless both parties knowingly consent.

The linguist can be brought into such a case either by the prosecution or the defense. If the law enforcement agency is concerned about the adequacy of the language evidence that they have gathered, they may call on a linguist to make their own transcripts or to correct already existing transcripts of the conversations. Linguists also analyze the tape recordings to determine whether or not the agents' representations of illegality have been made clearly and unambiguously and whether or not the target has clearly suggested or agreed to the illegal act. When the defense attorney calls on the linguist, the same tasks are central.

After the electronically recorded evidence is gathered and the suspect is indicted, copies of the tapes must be turned over to the defense as part of what is called "discovery." As soon as it is reasonably possible, the prosecution is then required to make written transcripts of the recordings and turn them over to the defense as well. In most cases, this exchange of evidence occurs well in advance of the trial, so that the defense can have adequate time to prepare.

In transcript preparation, linguists use the tools of their trade, depending on the specific task. Preparing a jury-ready transcript requires a good ear, access to good listening (and/or viewing) equipment, and knowledge of language variation, syntax, semantics, and phonology. It may not be surprising to learn how difficult it is to produce an accurate, jury-ready transcript of conversations that are recorded in noisy restaurants or with other external interfering noise. In fact, legal battles sometimes ensue about the often-important differences found between competing transcripts prepared by the prosecution and those made by the defense.

The jury will indeed hear the tape but also it is commonplace for the court to provide juries with a transcript in order to make their task simpler. The tape is the evidence and the transcript is only an aid to the jury. But people tend to remember what they see much better than what they hear, making accurate transcripts very

important for this reason alone. In any case, conversations recorded by body microphones are often very difficult to hear. They are often recorded in restaurants, bars, street traffic, and under conditions that do not promote easy hearing for later listeners. If the government transcript represents a person saying "I'd take it today." for example, when the words on the tape are actually, "I wouldn't take it today," serious jury misperception may occur (Shuy 1993).

 It is not always clear just exactly how transcripts are produced but it appears that the government usually employs an office secretary or a court reporter to make them, after which the participating undercover agent reviews the transcript and corrects perceived errors and omissions. When the defense makes a transcript, the same general procedure obtains, except that the task of reviewing and correcting is done by defendants and their attorneys. The objectivity of such reviewing by either side is, at best, suspect, since the schemas of participants sometimes cause them to think they hear something that is not actually on the tape at all. An outsider to the case, such as a linguist, does not (or should not) have such a schema or bias.

The content of the tape-recorded evidence itself points to the use of the other tools of the linguist, including syntax, morphology, semantics, pragmatics, dialectology, and discourse analysis. The presentation of such analyses can give linguistic lay persons (such as juries) scientific reasons for their perceptions, opinions or

feelings that might otherwise be arbitrary or ungrounded. Likewise, such analyses can help laypersons (such as juries) to see patterns of language use that are visible only through the help of expert linguists. Just as the training and expertise of medical professionals enables them to describe and define the meaningful content of an X-ray, so linguistic experts can describe and define the meaningful content of tape- recorded conversations.

Grammatical referencing is often unclear in everyday language and unless the reference that the prosecution believes to be critical is actually clear and unambiguous, the prosecution's case may fail. In one criminal case in which a defendant was charged with agreeing to purchase narcotics for resale in order to make enough money to save his company from bankruptcy, the following utterance was considered central to the prosecution's case (Shuy 1993):

> Undercover agent: What do you think about investment?
> Target: I think investment would be a good thing.

The law enforcement officer thought that the target had thereby agreed to invest his remaining assets into the illegal drug scheme proposed by that agent. In thinking this, however, the agent overlooked the fact that during his five months of tape recording this target, he had clearly failed to elicit anything illegal. Up to that point, in fact, the agent, posing as a legitimate banker, had continuously offered the target two potential perfectly legal

avenues of action. One was to get a loan for the target and the other was to help him find some investors who might purchase stock in the target's company. In the sixth month of these conversations, the "banker" now changed his story, saying that he couldn't get the target a loan, but that he was deeply involved in a cocaine business on the side. If the target would use his remaining company resources to purchase drugs, the agent could sell the cocaine quickly and the target would reap a large, quick profit and thereby avoid bankruptcy. Stunned by this revelation, the target did not offer a blanket yes or no, because he didn't want to erase the potential of getting stock investors. He believed that saying no to the drug proposition would kill that last remaining possibility. In fact, the target was no clearer than the agent about what "investment" meant here. Neither man had specified the defined referent to which "investment" could be associated, although the target's continuing contextual meaning of "investment" over the previous five months was made perfectly clear by the linguist.

In cases of lexical ambiguity such as this, the prosecution's normally defers making an indictment until the have elicited more unambiguous statements from the target. In this particular case, the government's intelligence analysis proved faulty. An indictment was made on the assumption that the target had actually agreed to invest in the drug scheme. At trial, the defendant was acquitted, thanks at least partially to the assistance of the linguist in this case.

Discourse analysis is another important tool used by forensic linguists, especially in cases involving tape-recorded conversations. Topic introduction and recycling, for example, provide very useful clues to the agenda or intentions of a speaker. As noted earlier, the linguist cannot know for sure what the speakers' intentions really are, but a careful examination of the topics they bring up offers a useful indication of what they are thinking about, what is foremost in their minds and, perhaps even more important, what is not on their minds.

Likewise, a careful analysis of the responses that given persons make to the topics introduced by others offers a similar clue to their agendas and intentions. If speakers either agree or disagree clearly, the evidence is pretty clear. But if they change the subject or say nothing at all about it, offer indications that this topic was not to their liking, indicate that that they are not interested in it, or politely side-stepping it, they offer a reasonable clue to their intentions.

When the target responds to another person's topics with only feedback markers such as "uh-huh," law enforcement agencies often become confused. Many times, the prosecution tends to consider "uh-huh" to be an agreement or understanding when, in fact, it is only a feedback marker used to indicate that the listener is still listening but not necessarily agreeing, that he or she doesn't really understand the gist of the topic but will hear it out anyway, or that he or she is not really listening at all but is just making

polite social noises. It is common for recorded conversation used as evidence in criminal cases to contain examples of feedback markers that the prosecution erroneously attributes to understanding and agreement. In one recent example, an undercover agent tried to elicit agreement from his boss that a commission his company paid to a consultant violated government regulations. The situation was complex, since this consultant was at the same time receiving perfectly legal commissions from another unrelated source. The portion of their conversation that the prosecution considered inculpatory was the following:

> Undercover Agent: Ari's calling me every day...He's worried, I guess, about his payment, his commission.
> Target: Uh-huh.

The target's "uh-huh"can indicate his agreement that Ari is worried about getting his commission but, since there is no specification about what this commission is for or who it is from, there is nothing here that would indicate that he agrees that this commission is from the target's company. Nor is there anything in the preceding or following discourse indicating that the target is even interested in Ari's problems about getting this commission, wherever it was from. Further complicating this exchange is the contextual fact that the undercover agent had made himself a general nuisance by spending far too long updating his very busy boss with what he considered somewhat trivial information. It is even possible that the target's "uh-huh" was the polite noise-

making type that had nothing to do with his understanding or agreement.

Armed with the linguist's analysis of this passage, the attorney presented it at trial by himself. Perhaps the best help that a linguist can give an attorney is to make the analysis so clear that it does not even need to be presented by an expert witness. Good attorneys can use this in their cross-examinations and closing arguments.

Police interrogation and eliciting confessions

In criminal cases, linguists apply their knowledge of speech acts to significant issues involving offers, promises, denials, and agreements found in tape-recorded evidence (Shuy 1993). They also use the tools of linguistics when they examine confessions elicited during police interrogations in an effort to make clear what, if anything, was actually confessed and whether or not that alleged confession was tainted by the manner in which it was elicited (Shuy 1998; Heydon 2005; Rock 2007).

 Law enforcement agencies gradually are beginning to record such confessions electronically in order to guard against accusations of undue police pressure or improper promises. Such recordings make it possible for forensic linguists to apply their skills for either the prosecution or the defense. But even when confessions are electronically recorded, some law enforcement agencies tape only the final part of the interrogations, the part that captures the

eventual confession statement. Such practice can convince juries but it tells them nothing about how that confession was obtained.

Some argue that it would be better for law enforcement to videotape the entire interrogation so that later viewers, such as juries, could be assured that no coercion took place and to be able to determine whether the interrogators put words into the suspects' mouths. False confessions have been thought to fall into the academic territory of psychologists (Leo 2008), but the confession event is a rich source for linguistic analysis as well.

3. Research on the language of law

Jury instructions

To this point, the focus has been on *practicing* forensic linguistics in actual law cases. In addition to the types of law cases noted above, there are many other areas where linguistics associates closely with law. Research represents one part to this field. For example, considerable research has been done on the court's problem of producing clear jury instructions (Charrow and Charrow 1979; Tiersma 1999; Dumas 2000). Before the jury retires to deliberate, the judge reads a list of instructions that are intended to guide them in arriving at their verdict. Linguists have found that such instructions are sometimes incomprehensible to the jurors.

Furthermore, when a deliberating jury sends out a note requesting

clarification, the judge often simply repeats same instructions. Judges walk a fine line here, trying to translate the language of law into the language that laypersons can comprehend without creating a reversible error than could lead to retrial.

Statutes and statutory interpretation

Some linguists are also lawyers, giving them that expertise to analyze statutes, laws and their interpretations. Linguistic analysis of statutes and legal rules, interpretation, and procedures tends to be done by linguists who are also law professors who have strong linguistic backgrounds (Ainsworth 2006). Solan's book, *The Language of Statutes* (2010) provides many examples of the problems posed by the language of statutes, including such topics as the role of intentionality, battles over ordinary versus definitional meaning, the effect of language change on statutory interpretation, the linguistic coherence of statutes and procedures, and the disputes over familiar legal terms such as "knowingly," "public official," "harm," and others. Important work in this area also has been carried out by Ainsworth (1993), Solan (1999, 2004, 2005, 2009), Hutton (2009), and Tiersma (1999, 2010).

Specific types of law cases that intersect with linguistics also have received considerable attention from lawyer/linguists. Tiersma has described linguistics issues in perjury (1990), defamation (1987) and product liability (2002). Solan has written about linguistic aspects of the language of contracts (2001, 2004).

Bureaucratic language

Examples of the problems that government agencies have when they try to communicate statutes to the public, often resulting in what has been called "bureaucratic language," is described by Shuy (1998). Such language may be appropriate and necessary within law but, like all specialized language, it faces serious comprehensibility problems when it is used to communicate outside its own province, especially to legal laypersons. Yet, this is what bureaucracies need to do as effectively as possible. Linguists can be very helpful in this.

Language of the courtroom

Some linguists focus their research on the ways language is used by lawyers, judges, and witnesses in the courtroom (Kurzon 1986; Levi & Walker 1990; Gibbons 1994, 2003; Tiersma 1999; Gaines 2000; Solan and Tiersma 2005), especially on the ways lawyers and judges use it during legal procedures (O'Barr 1982; Conley and O'Barr 1990, 1998; Solan 1993; Tiersma 1993; Matoesian 1993, 2001; Phillips 1985, 1998; Stygall 1994; Cotterill 2003; Heffer 2005; Schane 2006; Rock 2007).

Some linguists conduct research concerning the asymmetry of power in courtrooms and police stations (O'Barr 1982; Lakoff 1990; Ainsworth 1993; Cotterill 2003; Shuy 2005). At trial as well

as during police interrogations, language power clearly resides on the side of judges, attorneys, and law enforcement. The testimony of witnesses and suspects is controlled by a rigid question-answer format that enables attorneys, judges, and police interrogators to structure and control the sequence and content of what is said. However useful or necessary this may be for trial and police interviewing efficiency, it runs counter to laypersons' natural, normal ways of using language. It prevents them from introducing their own topics or telling their own stories in their own familiar ways. Consequently, they often run a serious risk of not communicating what they want to get said. Since they are so linguistically vulnerable, they can be accused of being untruthful by their manner of speech, fettered as it is by courtroom and police station constraints (Conley & O'Barr 1998). One of the most frustrating experiences reported by even expert witnesses is that they are forced to answer "yes" or "no" to questions for which neither answer is complete, appropriate, or adequate. Such experiences are not unlike trying to communicate in a different language and culture.

It is not uncommon that defendants, plaintiffs, or witnesses in court are not native speakers of English. This poses serious problems for them as well as for attorneys and judges. Berk-Seligson deals with the difficult problems of Hispanics during trials (1990, 2002) and also during police interrogations (2009). Eades addresses the serious problems of Australian Aborigines when they are interviewed by the police and when they appear in the English

speaking courts (2008, 2010).

Further complications come from the linguistic naivete of some courts in these matters. For example, when undercover tape recordings are made in languages such as Mandarin or Spanish, U.S. courts frequently use a translator to provide written English translations of the conversations and then present those translations as the evidence. Missing is the essential middle step, that of first providing a transcript of the spoken conversations in the first language upon which that translation is based. The same errors in transcript preparation noted for transcripts of spoken English can easily occur in non-English languages as well, but they can be checked against the taped evidence. Without the necessary intermediate transcript in the first language, any possible dispute about the accuracy of the translation is seriously limited. Going straight to the translation without first providing a transcript of the non-English speech may be time and cost efficient for the courts, but it is linguistically naive, if not dangerous. Linguists have been trying to make this point to the courts in recent years.

Interpreting for the hearing impaired provides even further complications in the courtroom since American Sign Language does not easily translate into neat and conventional English sentences and expressions (Lucas 2002). In recent years, linguists have begun to research this issue and many courts are now providing interpreters when they deem it necessary. The U.S. federal Court Interpreters Act of 1978 (and its trickle-down effect

on state and municipal courts) was designed to avoid denying the constitutional rights of the non-native English speakers and the hearing impaired in the American court system. However worthwhile and necessary such legislation is, a number of problems remain. How can we best recruit and train such interpreters? What standards should apply to translators and interpreters? How can we provide such services for all of the many possible languages for which there is need? How do we know the extent to which non-English speakers have mastered enough English to be able to use it effectively to help their lawyers defend them? How do we deal with residual cultural differences of non-native speakers?

4. The future of linguistics and the law

During the relatively brief history of forensic linguistics, we have seen a number of developments, including the advent of new technologies, such as electronic recordings, e-mails, and text messages used as evidence. Each new development calls for linguists to find new ways of adapting their use of linguistic principles and analytical procedures. But these principles and analytical procedures remain fairly constant. Forensic linguistics is, after all, primarily the study and use of linguistic tools in the legal context. And even these tools continue to develop rapidly. When linguists first began this work, speech acts, pragmatics, and discourse analysis were relatively unheard of. Today, along with

newer developments in the tools of phonology, syntax, semantics, and sociolinguistics, the potential for using linguists in law cases is even richer.

In terms of research on interpretation of statutes, the language of the courtroom, and the language of judges, lawyers and witnesses, we also see a wide-open area for further linguistic study. In terms of forensic linguistic practitioners, especially in the area of authorship identification, we need to learn more about how to deal with small evidence samples, to learn which linguistic features best identify authors, and to discover how many occurrences of any linguistic feature are enough to make such identification possible. And we are only scratching the surface about how to deal with bilingual courtroom issues.

Although the field is rapidly expanding, both researchers in language and law and forensic linguists practitioners need to learn to communicate more effectively with the field of law so that our knowledge, theory, research findings, and skills will be more available to lawyers and judges, who with some justification already pride themselves about their knowledge of how language works.

Practitioners also will need to do a better job of self-regulation, making clear what constitutes an expert in this field so that the marginally qualified do not sully the reputation and potential usefulness of those who are true linguistic experts. They also need to determine the best way to prepare future forensic linguists

without setting up still other separate academic departments that might remove training further away from their essential core field of linguistics.

In the United States, more and more courts permit linguists to testify as experts at trial (Wallace 1986; Solan and Tiersma 2005). In those few criminal cases in which judges have ruled that linguists' testimony would not be permitted, the reason given was often based on an attorneys' representations of what those linguists *might* say rather than on what the linguists could have said had they been allowed to make their own representations of their proposed testimony. Linguistic experts are virtually never rejected based on the scientific reputation and respectability of the field of linguistics, which by now appears to be established in the courts. But whether the linguist testifies or not, it is clear that more and more attorneys and government agencies are calling on forensic linguists to assist them in analyzing the spoken and written language that frames the evidence in both civil and criminal law suits. It is also the case that more and more universities are offering courses on topics of language and the law.

Since expression of the content as well as the presentation and delivery of law is largely dependent on language, the future of linguistics appears to be very promising in the legal arena.

Suggestions for further reading

Because there is no established core of readings in the field of

linguistics and law, the following brief list of books is only a suggestion for those who wish to get a basic understanding of the field:

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Coulthard, Malcolm & Alison Johnson. 2007. *An Introduction to Forensic Linguistics: Language and Evidence*. London: Routledge.

Gibbons, John. 2003. *Forensic Linguistics: An Introduction to Language in the Justice System*. Oxford: Blackwell.

McMenamin, Gerald R. 2002. *Forensic Linguistics: Advances in Forensic Stylistics*. Baton Rouge: CRC Press.

Shuy, Roger W. 2005. *Creating Language Crimes*. New York: Oxford U Press.

Shuy, Roger W. 2008. *Fighting Over Words: Language and Civil Law Cases*. New York: Oxford U Press.

Solan, Lawrence & Peter Tiersma. 2005. *Speaking of Crime: The Language of Criminal Justice*. Chicago: U Chicago Press.

Tiersma, Peter. 1999. *Legal Language*. Chicago: U Chicago Press.

Linguistic societies related to forensic linguistics:

The International Association of Forensic Linguists

The International Association for Forensic Phonetics and Acoustics

The Linguistic Society of America

The Law and Society Association

The American Dialect Society

Journals related to forensic linguistics:

The International Journal of Speech, Language and the Law (formerly Forensic Linguistics)

Language

Law and Society

American Speech

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