Collaborations in the Courthouse:
Making Legal Language Accessible

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Abstract

The Northeastern University Linguistics and Law Lab aims to improve justice and make legal language clear and accessible through linguistic research. Our current research program focuses on identifying and minimizing the most challenging linguistic factors in jury instructions. So far, our results show that factors like passive verbs and legalese make jury instructions harder to understand. We can improve comprehension significantly by minimizing these factors and providing written texts along with spoken instructions.

Our research can have its greatest impact by fostering connections with the legal community. We have been publishing outside our discipline, collaborating at interdisciplinary meetings, and working directly with legal professionals. Together with the Northeastern School of Law, we hosted a conference where academics and legal professionals examined justice through a linguistic lens. We have also appeared in professional publications in both law and linguistics, as well as the international popular press. Recently, we have been working with judges to simplify the language they use in the courtroom. There are many opportunities for linguistics–law collaborations, and taken together, they will have a positive impact on justice.

Keywords: jury instructions; legal linguistics; passive verbs; legalese

Introduction

The Linguistics and Law Lab at Northeastern University is working at the intersection of linguistics and law, bringing the insights of linguistics to the legal community. Across all of our projects, our goal is to make legal language clearer and more accessible. In Section 1, to set the stage, we will provide some background on the U.S. legal system. In Section 2 we discuss how we began collaborating with the legal community. In Section 3 we focus on our major project: a set of psycholinguistic studies on the language of jury instructions. Finally, Section 4 covers some of our other projects. Through all of our research, we have successfully engaged with legal professionals and, along the way, provided excellent educational opportunities for our student research assistants to learn to be professional linguists.

1. The U.S. Judicial System

"Trial by jury" is a fundamental concept in the legal system of the United States of America, encoded in the U.S. Constitution: "The Trial of all Crimes…shall be by Jury" (U.S. Const. art. III, § 2). Among other rights, it guarantees those accused of crimes the right to be tried by their peers, who listen to the evidence on both sides of a case and determine a verdict. Any citizen over the age of 18 can be a juror. From a set of potential jurors who are called to the courthouse each day, judges and lawyers generally draw a set of 14 (12 + 2 alternates) to serve on each case (Federal Judicial Center, 2006).

The Constitution further explains, "such Trial shall be held in the State where the said Crimes shall have been committed." Today, all fifty states hold jury trails, but we will focus on trials in the state of Massachusetts.

1.1 English Origins

The U.S. jury system comes from English common law. Trial by jury protected "common" people from the overreaching power of their feudal lords. Later, after the Glorious Revolution of 1688, the right to a trial by jury was reaffirmed in the British Bill of Rights (von Moschzisker, 1921; West Virginia Association for Justice, 2014).

1.2. Colonial Juries

As colonists left England for the New World, they brought the tradition of trial by jury with them, incorporating it into many state charters. Trial by jury soon became a vital and iconic component of American colonial life. In fact, though the trigger for the American Revolution is usually attributed to an economic dispute over unjustified taxes, another motive was the British assault on the colonists' right to trial by jury. The state of Massachusetts was an early leader in demanding that this right be guaranteed in the Constitution and made this a condition of joining the Union. (Office of Jury Commissioner, 2018).

1.3. The Allure of Juries

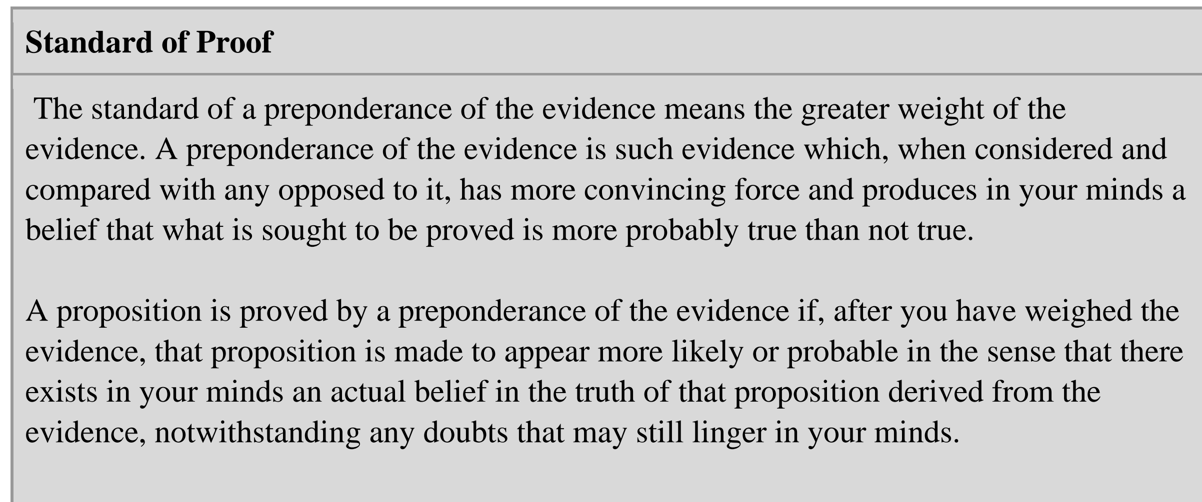
Trials in many places take place not in front of a jury, but in front of a judge. The motivation to use a jury is the desire to distribute power across all levels of society. Only very few citizens become judges, and their status in society may make them unable to empathize with ordinary people. Furthermore, a judge is only a single person, and may be susceptible to influence. In the case *Duncan v. Louisiana* (1968) it was asserted that "A right to jury trial is granted to criminal defendants in order to prevent oppression…and to protect against…judges too responsive to the voice of higher authority…the compliant, biased, or eccentric judge." Jury trials expand the number of decision-makers and aim to eliminate personal bias. Essentially, and importantly, the right to a trial by jury depends on the belief that every citizen can understand, interpret, and apply the law.

1.4. The Risk of Juries

Suppose the most basic assumption underlying trial by jury is false. What if the ordinary citizen *can't* understand the law? Juries consist of the accused's peers: doctors, construction workers, teachers, students, domestic workers, and the like. Therefore, most jurors have scant legal background and enter the courtroom knowing little more about court proceedings than what they've seen on television. A jury composed of ordinary citizens can certainly deliver a fairer verdict than an individual judge. But to do so, jurors need to know *how* to make a fair decision—and that is the job of jury instructions.

1.5. A Jury is Only as Good as Its Instructions

The judge presiding over the case gives a set of instructions to the jury. These instructions explain the jury's task in evaluating the elements of the case and reaching a verdict. They learn which information to trust, how to evaluate witnesses, what counts as evidence and what does not. They also learn how strong the evidence must be to find the defendant guilty. This is called the "standard of proof." Conveying the instructions to the jurors can take well over an hour. If the jurors cannot understand the instructions, they are unlikely to deliver a fair verdict. And our research shows that this is indeed the situation. Jury instructions are not phrased in everyday language. They are often a mass of nearly incomprehensible sentences. To give you a sense of how difficult these instructions are, an excerpt of one instruction, *Standard of Proof*, is shown in Figure 1.



Standard of Proof

The standard of a preponderance of the evidence means the greater weight of the evidence. A preponderance of the evidence is such evidence which, when considered and compared with any opposed to it, has more convincing force and produces in your minds a belief that what is sought to be proved is more probably true than not true.

A proposition is proved by a preponderance of the evidence if, after you have weighed the evidence, that proposition is made to appear more likely or probable in the sense that there exists in your minds an actual belief in the truth of that proposition derived from the evidence, notwithstanding any doubts that may still linger in your minds.

Figure 1. *The Standard of Proof* Brady, Lipchitz, and Anderson (2008).

But where did these nearly incomprehensible words come from? And why do they persist? Jury instructions must convey all of the elements of a case. To be precise, they must be stated in specialized legal prose. The original texts are passed down from one set of judges to the next, which maintains their accuracy but also suggests that they are "sacred texts" that should inspire awe and respect for the court and must *not* be changed. Courts that do decide to change them encounter many roadblocks along the way: inertia, the daunting nature of the task, the fear that past decisions made under earlier versions of the instructions will be challenged, and the belief that the problem is not that jurors can't understand them, but that jurors just aren't listening carefully, and no amount of revising will help.

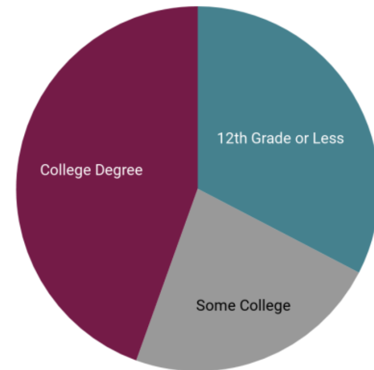


Figure 2. Massachusetts Education Levels, 2018

However, studies have shown that the sentence structure of jury instructions makes them difficult for even college students to parse (see Sections 2.2. and 2.3., below.). In Massachusetts, over half of the residents have not graduated from college (see Figure 2) (U.S. Census, 2018). Since these instructions are challenging even for residents with many years of schooling, imagine how challenging they are for those with fewer. And even judges who resist changing the instructions agree that every juror, regardless of their education, should understand them. Something needs to be done.

2. The Linguistics and Law Lab

In 2010, a group of judges and lawyers in Massachusetts decided to try to fix the problem and approached a linguist. This group, the Massachusetts Bar Association[1], invited Dr. Janet Randall of the Northeastern Linguistics Program to help them revise Massachusetts jury instructions by translating them into "plain English" that everyone can understand. Before making any changes, however, it was important to know: how confusing for jurors are our current instructions? What causes this confusion?

To investigate these issues at the crossroads of law and language, Randall recruited a team of students and formed the Linguistics and Law Lab. The students brought perspectives from a variety of disciplines—linguistics, psychology, computer science, statistics, and law—which broadened our range of questions and experimental methods. In the next section, we will discuss our recent studies on the comprehension of legal language.

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[1] A Bar Association is a voluntary group of legal professionals who serve the legal profession and the public by promoting the administration of justice, legal education, professional excellence, and respect for the law.

3. Major Studies

Since 2013, our lab has completed three major studies to examine what makes jury instructions so difficult to understand. We chose six civil instructions and wrote new versions in plain English, which simplified the complex syntax and semantics. The new versions eliminated deeply embedded clauses and multiple negatives, turned passive verbs into actives and nominals into their underlying verbs. The new instructions minimized legal jargon, also called "legalese." Many of these technical terms have non-technical meanings and can be very confusing. The goal was to see if the new versions were easier to understand than the originals. That was the hypothesis of Study 1.

3.1 Study 1

3.1.1 Hypotheses

This study tested two hypotheses. Hypothesis 1 was that plain English instructions will be easier to understand than instructions currently in use. Hypothesis 2 claimed that spoken instructions will be easier to understand when listeners also had a written copy. This is supported by findings in the literature demonstrating that reading-along enhances listeners' comprehension of spoken language (Alaka, 2011; Chang, 2009; Marder, 2006).

3.1.2 Subjects, design, materials, and procedure

The study tested two versions of each instruction, using a subject pool of 214 undergraduate students. Each subject was assigned to one of four conditions in a 2×2 design, as shown in Figure 3. The four conditions were Original Listening (OL), Original Listening+Reading (OR), Plain English Listening (PL), and Plain English Listening+Reading (PR).

	Original	Plain English
Listening Only	OL	PL
Listening + Reading	OR	PR

Figure 3.

The Original instructions are the ones currently in use in Massachusetts. The Plain English versions were developed by our team and a group of judges. In the Listening condition, subjects heard a recording of the instructions, in the Listening+Reading condition, subjects had a copy to read along.

Subjects listened to the instructions one by one. To test their comprehension, after each instruction subjects answered a set of true–false questions. Figure 4 shows two versions of one of the instructions, Standard of Proof.

Standard of Proof	
Original Instruction	**P**lain English Instruction
The standard of proof in a civil case is that a plaintiff must prove (his/her) case by a preponderance of the evidence. This is a less stringent standard than is applied in a criminal case, where the prosecution must prove its case beyond a reasonable doubt. By contrast, in a civil case such as this one, the plaintiff is not required to prove (his/her) case beyond a reasonable doubt. In a civil case, the party bearing the burden of proof meets the burden when (he/she) shows it to be true by a preponderance of the evidence. The standard of a preponderance of the evidence means the greater weight of the evidence. A preponderance of the evidence is such evidence which, when considered and compared with any opposed to it, has more convincing force and produces in your minds a belief that what is sought to be proved is more probably true than not true. A proposition is proved by a preponderance of the evidence if, after you have weighed the evidence, that proposition is made to appear more likely or probable in the sense that there exists in your minds an actual belief in the truth of that proposition derived from the evidence, notwithstanding any doubts that may still linger in your minds. Simply stated, a matter has been proved by a preponderance of the evidence if you determine, after you have weighed all of the evidence, that that matter is more probably true than not true.	This is a civil case. In a civil case, there are two parties, the “plaintiff”, and the “defendant”. The plaintiff is the one who brings the case against the defendant. And it is the plaintiff who must convince you of his case with stronger, more believable evidence. In other words, it is the plaintiff who bears the “burden of proof”. After you hear all the evidence on both sides, if you find that the greater weight of the evidence—also called “the preponderance of the evidence”—is on the plaintiff’s side, then you should decide in favor of the plaintiff. But if you find that the evidence is stronger on the defendant’s side, or the evidence on the two sides is equal, 50/50, then you must decide in favor of the defendant. Now, you may have heard that in some cases, the evidence must convince you “beyond a reasonable doubt”. That’s only true for criminal cases. For civil cases like this one, you might still have some doubts after hearing the evidence, but even if you do, as long as one side’s evidence is stronger—even slightly stronger—than the other’s, you must decide in favor of that side. Stronger evidence does not mean more evidence. It is the quality or strength of the evidence, not the quantity or amount, that matters.

Figure 4. Side-by-side comparison of an original and revised jury instruction, Standard of Proof.

3.1.3 Results and discussion

As shown in Figure 5, replacing the Original Listening and Reading instructions with Plain English Listening and Reading did not lead to a significant improvement. However, supplying the text did, for both versions. Making both changes led to the greatest improvement—compare the top bar (OL) with the bottom bar (PR). So taken together, Hypothesis 1 and Hypothesis 2 were confirmed.

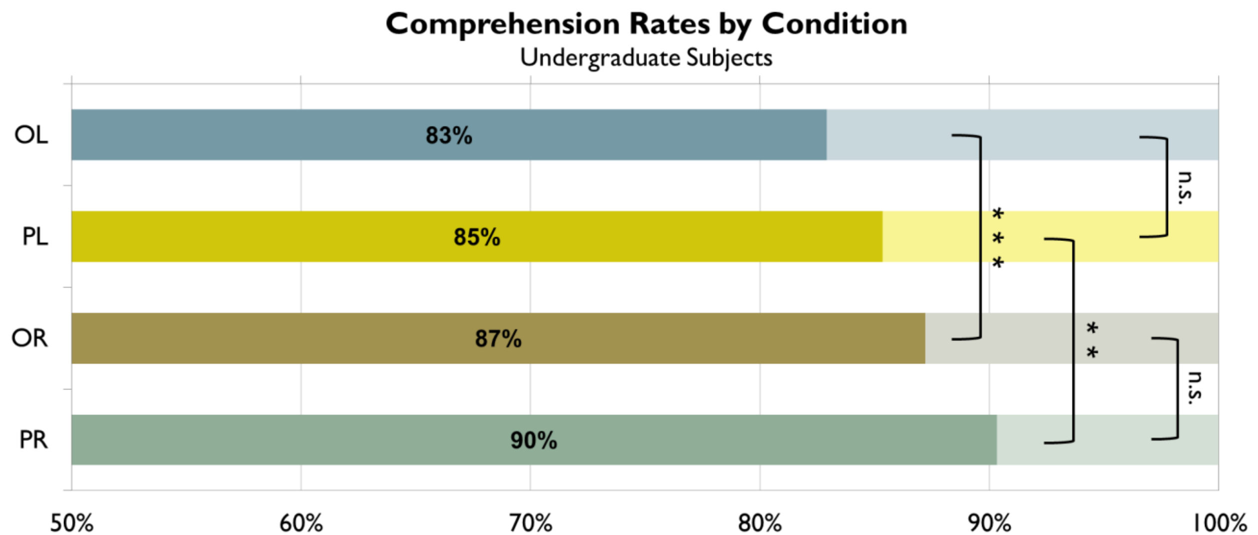
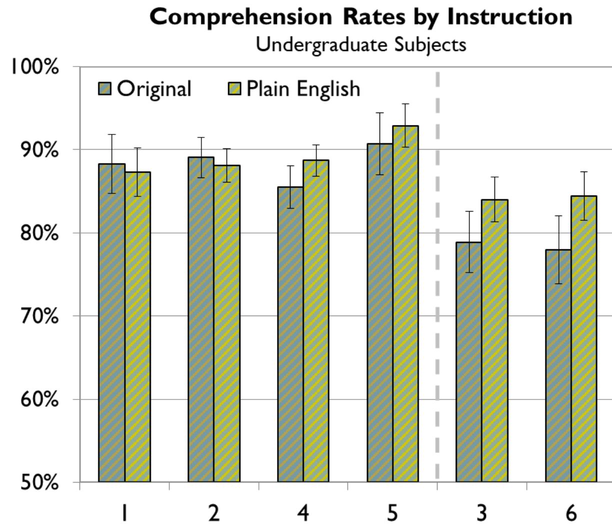


Figure 5.

A closer look at our results in Figures 6 and 7 reveals a likely source of the challenges. Figure 6 shows the effect of changing the instructions to Plain English, combining the Listening+Reading and Listening conditions. In other words, in Figure 6, the Plain English bars combine the yellow and green bars of Figure 5, and the Original bars combine the blue and brown bars. Instructions 3 and 6 (the bars to the right of the dashed line in Figures 6 and 7) had lower comprehension rates than the other instructions, as Figure 6 shows. A look at the linguistic factors in the six instructions demonstrates why. Figure 7 shows higher rates of passive verbs and legalese in Original Instructions 3 and 6 (the left sides of the double bars) compared to the other instructions. The Plain English instructions (the right side of the double bars) nearly eliminate both factors. These two factors seem to be responsible for the difficulty of Instructions 3 and 6 and the better comprehension of their Plain English versions. Comparing Figures 6 and 7 suggests an inverse correlation—the higher the rates of passive verbs and legalese, the lower the comprehension scores.



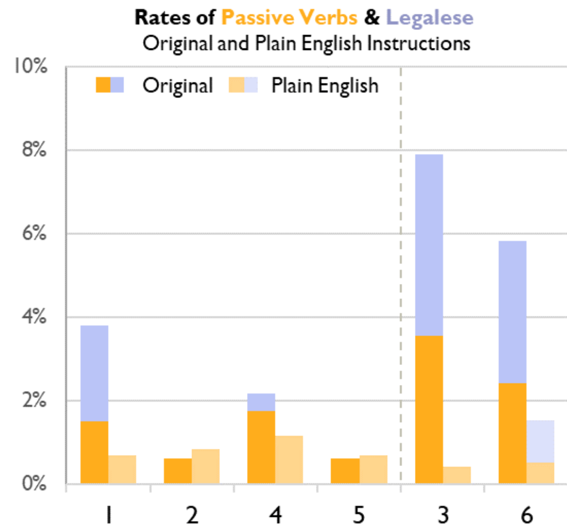


Figure 6.

Figure 7.

We might now ask why our Plain English versions did not lead to higher comprehension rates. Remember that our subjects were college students, so their baseline comprehension rate was high. In the OL condition (blue bar), it reached 83%. Perhaps a less educated subject pool would start out with a lower baseline and show more improvements.

3.2. Study 2

We addressed this question in our second study, using the same design, materials, and procedure as Study 1, but with a pool of subjects whose educational level more closely resembled a jury pool's. We recruited them using an online service called Amazon Mechanical Turk (MTurk). As predicted, their comprehension was lower in every condition, compared to the undergraduates'. As Figure 8 shows, their OL (blue) baseline score was 67%, compared with the undergraduates' 83%. In other words, they answered a full third of the questions incorrectly in the baseline condition. Their improvements from changing to Plain English and from Reading are both significant. Changing to Plain English improved the Listening scores from 67% (blue) to 80% (yellow), and the Reading scores from 80% (brown) to 85% (green). Reading improved the Original Instruction comprehension from 67% (blue) to 80% (brown) and the Plain English comprehension from 80% (yellow) to 85% (green).

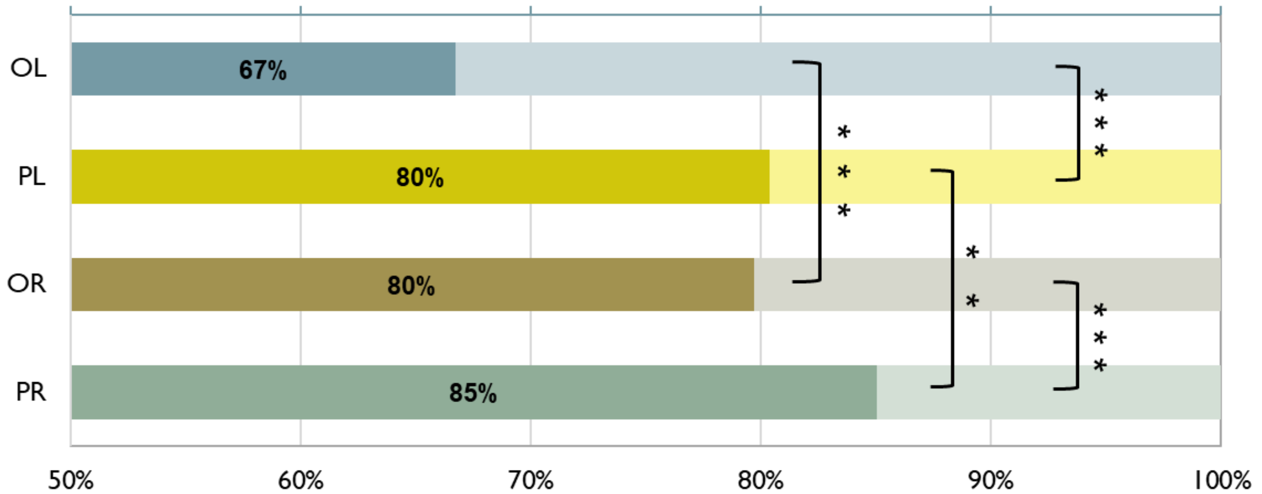


Figure 8.

Figure 9 shows the effect of changing the instructions to Plain English, combining the Listening+Reading and Listening conditions. As in Figure 6, this graph combines the two Original conditions (blue and brown) and the two Plain English conditions (yellow and green). But Figure 9 (with our MTurk subjects) shows significantly improved comprehension across every instruction, which Figure 6 (with our student subjects) did not.

Study 2 showed strong support for both of our hypotheses. Individually, changing to Plain English and adding Reading significantly improved comprehension—even more when combined. Since the subjects in this study more closely approximate the educational level of jurors than the students in Study 1, we expect that making similar changes in actual instructions will help jurors better carry out their duties in the courtroom.

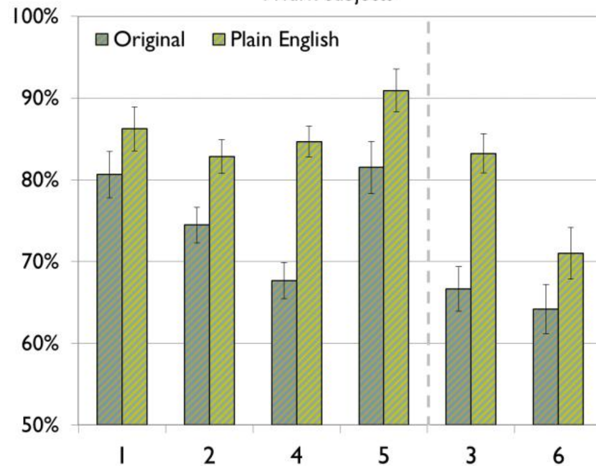


Figure 9.

3.3. Study 3

Although the MTurk subjects better approximated the jurors, they still had an advantage over them, which our students had as well. In Studies 1 and 2, subjects answered the questions for each instruction right after reading it, before proceeding to the next instruction and its questions. In an actual courtroom, though, jurors hear the jury instructions grouped together, one after the other, and then have to apply them. Would making our procedure more parallel to this make the subjects' job more difficult?

Figure 10.

We thought so. We hypothesized that grouping the instructions and giving all the questions together at the end would lower comprehension. And this is what we did in Study 3, which otherwise used the same design, materials, and subject pool (undergraduate students) as Study 1. Figure 10 compares the two.

The left side of the graph shows the overall comprehension rate in Study 1, with the "Ungrouped" procedure. The right side shows the overall comprehension rate with the new "Grouped" procedure. The Ungrouped overall comprehension rate was 86%, significantly higher than the overall Grouped comprehension rate of 82%. This difference confirms our hypothesis that grouping the instructions would lead to more comprehension difficulties. Though these subjects are not real jurors, the conditions of Study 3 do more closely model the usual procedures in a jury trial. As such, this study gives us the clearest picture so far of how actual jurors will fare.

3.4. Study 4: In Progress

Our research began when the Massachusetts judiciary asked for our help in rewriting jury instructions. Before starting, however, we needed to know how well current instructions are understood. With each of our studies, we have approximated more and more closely how well actual jurors will fare with both Original and Plain English versions. Our final experiment will take place in an actual courtroom, at the invitation of two of our collaborating judges. And though our plans have been delayed because of the pandemic, we will be meeting with these judges and running our next study when conditions permit. Our findings will certainly interest the broader legal community and, we hope, be a catalyst for change.

4. Other Projects

Outside of our work on jury instructions, we are collaborating in other areas at the intersection of linguistics and law.

4.1. An Interdisciplinary Conference: *The Syntax of Justice*

In 2017, Dr. Randall and the former Dean of the Northeastern School of Law collaborated on a two-day conference, *The Syntax of Justice: Law, Language, Access and Exclusion*. This conference brought together legal experts and linguists in a series of presentations and conversations, talking about the connections between language and law. The conference's key question was: *Justice should be accessible to everyone equally, but is it?* Participants examined the injustices that surround legal language, including prejudice against Americans who speak non-standard dialects and how the law community interprets silence. All of these linguistic misunderstandings can lead to exclusion and inequality, and linguistic research can help guide productive legal reforms. We presented our jury instruction research, which gave legal professionals an opportunity to view jury instructions from a linguistic perspective. The conference successfully promoted connections between linguistics and law, and we plan to collaborate on future projects with some of the judges who participated.

4.2. Word Frequency Analysis

Computing allows us to efficiently analyze the linguistic factors that impact the comprehension of jury instructions. We developed a program that determines the most infrequent words in a text, by taking the "lemma" of each word and then finding its frequency in a corpus (a lemma is the canonical form of a word). The word frequency approximates how commonly each word is used in everyday speech and allows us to predict the words that make a text difficult to understand. Our preliminary analyses on jury instructions found a negative correlation between the average word frequency of an instruction and its comprehension rate. In other words, "difficult" texts tend to contain fewer common words than "easier" texts.

4.3 *The Economist* Article

In the following year, 2018, we presented a poster at the Linguistic Society of America's Annual conference. One of the attendees was the language columnist for *The Economist*, the international weekly news magazine. Three months later, our research was the topic of one of his columns, which drew significant reader interest. One outcome was an invitation for Dr. Randall to join the Academic Advisory committee of the Civil Jury Project. That led to an opportunity to present a paper at their upcoming conference and to join a select subgroup for publication in a law journal later this year, where it will be more accessible to the legal community.

4.4 Collaborating with Judges

A second result of our 2017 conference was the opportunity to work with Massachusetts judges directly. Dr. Randall was invited to present two workshops to judges on how they can make their courtrooms more equitable by rewriting their jury instructions and providing jurors with written copies of them.

Since then, several judges have asked us to help them with their revisions. Working together, we are having a direct impact on courtrooms and building closer and more productive relationships between linguists and legal professionals.

5. Conclusion

The journey of Northeastern's Linguistics and Law Lab has been a productive one. Undergraduates have joined and graduated, studies have begun and concluded, and we have presented our work to a wide array of audiences. Along the way, students have been trained in how to conduct studies, have become more critical thinkers, have themselves delivered papers at conferences, and have been authors on published work. But our most important—and impactful—work started when we began to collaborate with the legal community. If the efforts to make legal language more accessible continue, then every citizen who enters a courthouse will be able to understand the language of the law and fully participate in fair and just legal proceedings.

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