Through the Eyes of Jurors: The Use of Cognitive Psychology in the Application of “Plain Language” Jury Instructions

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ABSTRACT

This article examines the social science research on schema theory in order to advance our understanding of how “schemas,” or the preexisting notions jurors have about the law, shape jurors’ use of jury instructions. “Through the Eyes of Jurors” is the first law journal article to look at all of the major cognitive psychology studies that examine how schemas continue to influence jurors’ use of jury instructions, even when those jurors are given “plain-language” instructions.

There is, of course, a significant body of legal literature examining jurors’ use and understanding of jury instructions, and many scholars have recommended ways to improve juror comprehension of instructions. This article takes that analysis a step further, and argues that even when given “plain-language” jury instructions, jurors will still be influenced by their preconceived ideas of what the “law” is, or in other words, by the preexisting schemas they have for legal concepts. Furthermore, these schemas are often legally incorrect, and findings from the social sciences suggest that, even when given plain-language jury instructions with the correct legal standard, jurors may still apply these legally inappropriate schemas. This article synthesizes the results and underlying theories of those findings in order to examine the impact these schemas have on jury decision-making, and on jurors’ use of jury instructions, and to identify ways lawyers and judges can counteract inappropriate existing schemas and activate legally appropriate schemas before jurors are introduced to the facts that are expected to interpret. Specifically, courts should use principles of cognitive and educational psychology to develop jurors’ schemas to more closely resemble that of the lawyers and judges in the case.

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TABLE OF CONTENTS

INTRODUCTION ............................................................................................................. 1
I. JURY INSTRUCTIONS AND SCHEMAS ................................................................. 1
   A. Different Schemas: Self, Person, Role & Event ......... 4
   B. Schema Activation: Priming & Framing .................. 8
   C. The Perseverance Effect ............................................................... 11

II. WHY WE NEED TO GO BEYOND “PLAIN-LANGUAGE” INSTRUCTIONS .......................................................... 19

III. THE IMPORTANCE OF THE REPRESENTATIVE JURY, AND SPECIAL JURIES AS A MODEL FOR IMPROVEMENT .......... 23

IV. RECOMMENDATIONS: HOW TO CORRECT OLD SCHEMAS AND CREATE NEW ONES ........................................ 23
   A. Expert v. Novice Schemas ......................................................... 26
   B. Developing Jurors’ Schemas to Make Them More Like Experts ......................................................... 29
   C. Helping Jurors Reduce Schema Perseverance ...... 32

CONCLUSION.................................................................................................................. 35
INTRODUCTION

“Where you stand depends on where you sit.” –Nelson Mandela

Assume that you are serving on a jury deciding a capital case. The defendant, John Smith, is on trial for murder. You are satisfied that the evidence has established guilt, but you must also recommend a sentence. You have two options: the death penalty and life without parole. You know what “death penalty” means, but what about “life without parole”? Does it mean exactly what it says—that under no circumstances will Smith ever be released? Or might he be released anyway, perhaps for demonstrating good behavior in prison or perhaps if the prison becomes overcrowded? The jury instruction does not answer the question, so you are left to your own preexisting understanding. Your answer may be a matter of life or death for Smith because you may think that the only way to protect the public from future danger is to impose the death penalty.

In fact, even if a jury instruction assures you that a sentence of life without parole will insure that Smith will never be freed, cognitive research says that you may still choose death in order to prevent future danger. In other words, you may continue to adhere to your preexisting idea even if a jury instruction clearly and directly sets out a different answer. Thus there is a lot at stake when we study the effectiveness of jury instructions.

In the past several decades, much of the social science research on juries has focused on jurors’ ability to remember, understand, and apply the judge’s instructions correctly, and studies have almost universally returned results finding low juror comprehension. In one empirical study of juror confusion, researchers tested the extent to which jurors understood pattern jury instructions commonly used in civil and criminal cases and found that the jurors understood less than half the content of the tested instructions. Because of this lack of jury understanding, much of the

2 Walter W. Steele & Elizabeth G. Thornburg, Jury Instructions: A Persistent Failure to Communicate, 67 N.C. L. REV. 77, 78 (1988). For an extensive collection of cases documenting juror misunderstanding, see Steele & Thornburg, at 79-83. In a study designed to learn the extent to which jurors referred to the instructions during
literature about jury instructions has focused on ways of improving juror comprehension, and, among other suggested reforms, scholars have encouraged the use of psycholinguistic principles to rewrite instructions to improve vocabulary, syntax, and organization, and make them simpler and more comprehensible to jurors.3

Less attention has been paid, however, to why jurors are not deliberations, the authors discovered that most jurors try to use the instructions, but are often confused by their meaning. Id. at 88. In that study, people called for jury service watched a videotaped reenactment of a murder trial, twenty-five percent of the jurors’ deliberations cited material from the instructions and jurors made seven incorrect statements about the meaning of the judge’s instructions, only one of which was corrected by other jurors. Id. at 84 (citing Reid Hastie et al., Inside the Jury (Harv. U. Press 1983)). In another study by Strawn and Buchanan, 116 people summoned for jury service but not chosen for a jury were divided into two groups. One group heard a twenty-five minute videotape of instructions in a burglary case. Even after hearing the instructions, however, many of these jurors either misunderstood or did not accept certain instructions. Despite instructions to the contrary, forty-three percent believed that circumstantial evidence was of no value, and twenty-three percent believed that when faced with equal evidence of a defendant’s guilt or innocence, the defendant should be convicted. David U. Strawn & Raymond W. Buchanan, Jury Confusion: A Threat to Justice, 59 JUDICATURE 478, 481 (1976). Jurors also misunderstood words in the instructions; only 51% understood the word “demeanor.” Id. at 481-82 (1976).

3 Psycholinguistics applies the theories of experimental psychology to the problems of language processing and comprehension. Robert P. Charrow & Veda R. Charrow, Making Legal Language Understandable: A Psycholinguistic Study of Jury Instructions, 79 COLUM. L. REV. 1306, 08 (1979); see also Robert D. Charrow, Joel D. Lieberman & Bruce D. Sales, What Social Science Teaches Us About the Jury Instruction Process, 3 PSYCOL. PUB. POL’Y & L. 589, 623-27 (1997); Amiram Elwork et al., Juridic Decisions: In Ignorance of the Law or in Light of It? 1 LAW & HUM. BEHAV. 163, 165-69 (1977). Other commonly proposed reforms have focused on encouraging active participation by jurors by allowing jurors to take notes and to ask questions. See, e.g., Council for Court Excellence District of Columbia Jury Project. (1998). Juries for the Year 2000 and Beyond: Proposals to Improve the jury Systems in Washington, DC. Washington, DC: Council for Court Excellence, Honorable B. Michael Dann, “Learning Lessons” and “Speaking Rights”: Creating Educated and Democratic Juries. 68 IND. L.J. 1229, 1251-56 (1993). Several studies have examined the impact of allowing jurors to take notes and to ask questions. Jurors will generally take notes when given the opportunity, and one study found that jurors who took notes felt they participated more during deliberation. Victor E. Flango, Would Jurors Do a Better Job if They Could Take Notes? 63 JUDICATURE 436, 442 (1980); Larry Heuer & Steven Penrod, Increasing Jurors’ Participation in Trials through Note-Taking and Question-Asking, 79 JUDICATURE 256, 258 (1996). Jurors who were allowed to ask questions generally asked three or fewer questions, and focused on the definition of key legal terms. Laurence J. Severance & Elizabeth F. Loftus, Improving the Ability of Jurors to Comprehend and Apply Criminal Jury Instructions, 17 LAW & SOC’Y REV. 153, 164-65. It is less clear whether note-taking and questions influence juror comprehension of the instructions.
always guided by even the clearest jury instructions.\textsuperscript{4} A large part of the answer may be the power of a juror’s own “preconstructions, preferred meanings, rhetorical and ideological dimensions.”\textsuperscript{5} The purpose of this Article, then, is to examine the impact these preconstructions, or “schemas” have on jury decision-making, and on jurors’ use of jury instructions, and to identify ways lawyers and judges can counteract inappropriate existing schemas and activate legally appropriate schemas before jurors are introduced to the facts they are expected to interpret.

Specifically, I recommend that courts use principles of cognitive and educational psychology to develop jurors’ schemas to more closely resemble that of experts, or of lawyers and judges. This prescription balances the competing goals of maintaining juries that represent a reasonable cross-section of their communities (a “jury of peers”), and of ensuring that those jurors are prepared and competent to analyze the law and facts they will encounter in a trial. Because jurors are legal “novices,” they view and interpret both the law and the facts differently than lawyers and judges,\textsuperscript{6} and most jury instructions do not do enough to help jurors compensate for this lack of expertise or develop appropriate schemas for legal concepts, especially given the time constraints imposed by a typical trial. Moreover, because instructions are typically drafted by lawyers (or committees of lawyers)\textsuperscript{7} who are already legal experts, they are not always drafted with novices in mind, or using principles that will best ensure novices fully comprehend the law.

I propose, then, that the goal of jury instructions should be two-fold: first, to give jurors the applicable law; and second, to help jurors correct existing schemas and develop new and legally correct schemas before they are exposed to the evidence in a trial. Although it would be impossible to bring jurors’ legal knowledge to the level of lawyers and judges in such a short period of time, we can use principles of educational psychology to help jurors develop new schemas efficiently, and therefore maximize learning. Moreover, these reworked instructions should be

\textsuperscript{4} See discussion infra Part II.
\textsuperscript{5} Peter Goodrich, Legal Discourse: Studies in Linguistics, Rhetoric and Legal Analysis, at 204.
\textsuperscript{6} See Fleurie Nievelstein et al., Expertise-Related Differences in Conceptual and Ontological Knowledge in the Legal Domain, 20 EUR. J. COGNITIVE PSYCHOL. 1043 (2008); see also discussion infra Part IV.A.
\textsuperscript{7} Peter Tiersma, The Rocky Road to Legal Reform: Improving the Language of Jury Instructions, 66 BROOK. L. REV. 1081, 1088 (2001); 89 C.J.S. Trial § 809.
given to jurors before the introduction of evidence, to help them develop appropriate schemas for the legal concepts before they are asked to apply those concepts to the facts in the trial.

To begin, Part I of this article will first discuss the use of jury instructions, as well as the role of schemas in how people view, interpret, and remember information and, once established, the perseverance of those schemas. This is significant because, once established, schemas influence what information people notice, and how they interpret that information; jurors are therefore unable to separate existing schemas (which may or may not be legally correct) from their use and application of jury instructions. Part II reviews the social science literature on how schemas affect jurors’ use of both pattern jury instructions, and instructions rewritten according to psycholinguistic principles. Part III then discusses the importance of the representative jury (a “jury of peers”) in the American legal system; this article does not suggest that we should abandon that system in favor of the use of “special juries” of experts, but instead recommends that courts help lay juries become more like special juries of “experts.” Finally, Part IV discusses the difference between expert schemas (those held by lawyers and judges) and novice schemas (those typically held by jurors), and recommends ways to correct jurors’ existing schemas and develop new schemas to make them more like experts’ schemas, which are better organized and more accessible, allowing for more thoughtful judgment and better, more uniform decision-making. Educational psychology principles inform this discussion and help illuminate how to more efficiently teach jurors to use relevant legal concepts and overcome schema perseverance.

I. JURY INSTRUCTIONS AND SCHEMAS

Jury instructions play an important role in all stages of the trial process. These instructions are generally culled from the applicable statutes and case law, and drafted by attorneys or advisory committees. Instructions tell jurors about the applicable law and give them a mechanism to interpret the facts they have seen in a trial; they are meant to ensure uniformity in verdicts and are typically given at the beginning of a trial, as needed throughout the trial, and at the end of closing arguments.

9 Peter Tiersma, The Rocky Road to Legal Reform: Improving the Language of Jury Instructions, 66 BROOK. L. REV. 1081, 1088 (2001); 89 C.J.S. Trial § 809.
10 Different types of instructions address the different things the jury is asked to consider. Some instructions tell jurors how to evaluate evidence and weight the credibility of
The most extensive instructions are generally given at the end of a trial; this is when jurors are told the applicable law, and how it should be applied to the facts they have learned throughout the trial. Instructions, therefore, are the crucial link between how a juror perceives and understands the facts they are told, and how they use those facts to reach a verdict, but jurors do not typically receive these guiding principles until after they have seen the evidence. When jurors do finally receive instructions, they are often full of language taken from statutes and cases that may mean different things to the lawyers who wrote them than they do to the jurors who are being asked to use them, and though they may be written plainly, they do not generally offer much guidance to jurors for applying them to the facts they have just heard and reach a decision.

Several models attempt to explain how jurors use the facts and law to come to a decision. The most prominent of these is the story model of juror decision-making, which suggests that in order to make sense of all of the evidence they are asked to evaluate, jurors construct a story of what they think happened. In this model, jurors use instructions to derive lists of the features of individual crimes or claims; if the story they have constructed shares enough features with the instructions, they will find the

witnesses, some explain the burden of proof, and others provide definitions and elements of crimes or claims. Neil Vidmar & Valerie P. Hans, American Juries: The Verdict 161 (Prometheus Books 2007).

Although there are few laws regulating the use and timing of instructions, the judge’s authority to manage a trial effectively allows for instructions at any point. Neil Cohen, The Timing of Jury Instructions, 67 Tenn. L. Rev. 681, 684 (1999-2000). As Cohen notes, Rule 51 of the FRCP gives the judge discretion to “instruct the jury before or after argument, or both,” and Federal Rule of Criminal Procedure Rule 30 allows the court to “instruct the jury before or after the arguments are completed or at both times.” Id. at 686. Some studies have examined the benefit of providing jurors with instructions at the beginning and the end of a trial, instead of only at the end, in order to provide jurors with a cognitive framework of the law and help them to better retain and understand the evidence. One study showed the timing of the instruction produced modest improvement in juror comprehension but did not improve recall of evidence (424) or affect the jury’s verdict. See Larry Heuer & Steven D. Penrod, Instructing Jurors: A Field Experiment with Written and Preliminary Instructions, 13 Law & Hum. Behav. 409, 424-26 (1989).

Imagine you were asked to make chocolate chip cookies and given a list of ingredients to mix together, and only once you had done that, were you told the precise amount of each ingredients to use, as well as the order in which you should add them to the batter. This is how jurors, ignorant of the precise technicalities of the law and the elements of claims, may experience their role a standard trial. They know generally what the claim or crime is they are being asked to consider, but have not been taught its basic principles, or given any guidance about how to consider the vast amounts of evidence they will hear at the trial.

Reid Hastie et al., Inside the Jury (Harvard U. Press 1983).
defendant guilty, and if it is missing too many requirements, they will find the defendant innocent.  

Because the rules of evidence generally limit inquiry into the validity of jurors’ decision-making processes, however, it can still be difficult to determine precisely how jurors are using jury instructions. As noted above, several studies have shown improved comprehension of plain language jury instructions, but this alone does not tell us the extent to which jurors are now relying on those new instructions, or the extent to which they use some combination of the instructions and other factors in reaching a decision about the facts. Studies suggest it is almost certainly the latter. In addition to the instructions they receive, some jurors might also rely on their opinions of the lawyers, or be swayed by strong opinions voiced by fellow jurors. Others might make a decision based on their “gut.” But what all of them are probably doing, whether they know it or not (and most probably do not), is using schemas to interpret and make sense of the information they have heard during the trial, and to help them come to a verdict.

A “schema” is a cognitive framework or concept that helps individuals organize and interpret information. For example, a schema for a party would contain ideas that are true about parties in most cases. Parties are social events where people come together to have fun, and often involve drinking, eating, talking, and dancing. If someone were to attend a party, this schema would be used as a general framework that

14 Peter W. English & Bruce D. Sales, A Ceiling or Consistency Effect for the Comprehension of Jury Instructions, 3 PSYCHOL. PUB.’Y & L. 381, 382 (1997).
15 FRE 606(b).
16 Adam Trahan & Daniel M. Stewart, Examining Capital Jurors’ Impressions of Attorneys’ Personal Characteristics and Their Impact on Sentencing Outcomes, 7 APPLIED PSYCHOL. CRIM. JUST. 93, 99 (2011) (noting that jurors in capital trials form impressions of attorneys based on physical characteristics, such as attractiveness, hygiene, and dress, and that these impressions have some influence on sentencing decisions. “Jurors who formed negative impressions of the defense attorneys were more likely to sentence their clients to death than those who reacted favorably toward the defense counsel.” Id. at 102.)
17 MARK COSTANZO, PSYCHOLOGY APPLIED TO LAW 151 (Thomson Learning 2004) (potential jurors judged to be “strong” are often well-educated, articulate, and have high occupational status, relative to other potential jurors); see also Samuel H. Solomon, How Jurors Make Decisions 5, at www.doar.com (last visited Aug. 4, 2012) (noting that jurors often look to other jurors with “perceived or real subject matter expertise,” and advising attorneys to explore the backgrounds of jurors who might have such expertise and to address them subtly during the trial.)
18 See discussion infra Part I.
would shape their expectations of the event and guide their behavior once they were there. Similarly, while all trees are different from each other and possess a variety of different characteristics (different colors, shapes, numbers of branches), we can easily recognize a type of tree we have never encountered before as a tree because we have a schema for trees.

Schemas are a type of cognitive shortcut—we rely on them to organize information and our past experiences so we can better, and more efficiently, understand new experiences. Schemas can be quite useful because they allow us to quickly interpret vast amounts of information, and they help us deal with confusing, missing, or unknown information. However, these frameworks can also influence what information we notice (we tend to notice information that fits into existing schemas and ignore that which does not), as well as what information we remember (we similarly tend to remember information that is consistent with established schemas and have more difficulty recalling that which is not). Of course, schemas can also be rigid, or based on incomplete information, and in these circumstances, might require reassessment.

The process of schemas development begins in early childhood; as we encounter things for the first time, we integrate the new information, activity, or concept into our memories by incorporating it into our schemas. A schema, therefore, represents an individual’s accumulated knowledge, beliefs, and experiences.

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19 Martha Augoustinos & Iain Walker, Social Cognition: An Integrated Introduction 33 (Sage Publications 1995). Definitions for schemas are varied. Susan Fiske and Shelley Taylor describe a schema as “a cognitive structure that represents organized knowledge about a given concept or type of stimulus, Fiske & Taylor, at 140, while Reid Hastie defines schemas broadly to include “almost any of the abstract hypotheses, expectations, organizing principles, frames, implicational molecules, scripts, plans, or prototypes that have been proposed as abstract mental organizing systems or memory structures.” Reid Hastie, Schematic Principles in Human Memory, in The Ontario Symposium, 39, 39 (E. Tory Higgins et al. eds., 1981). Moreover, some scholars also use the term “knowledge structures” to refer to schemas. Nievelstein, et al. at 1046.

20 Singer & Revenson, at 17.

21 Augoustinos & Walker, at 32-33.

22 See generally Fiske & Taylor, at 180-81

23 Augoustinos & Walker, at 33. A stereotype is a type of schema, in that it organizes information about a particular group. Id. at 208; see also infra note ___ (on stereotypes).

24 Singer & Revenson, at 17
Once developed, schemas are available for application to new situations and this application process is automatic.\textsuperscript{25} We do not see a furry object with four legs and a tail, we see a cat. Furthermore, the cat schema is automatically activated by incoming information. This process happens unintentionally and unconsciously, and the process does not interfere with other mental activity.\textsuperscript{26} Schemas therefore allow us to process information efficiently; because we know what to expect, we do not have to approach each person or situation we encounter as completely novel. As Fiske & Taylor note, “the most fundamental principle suggested by schema research is that people simplify reality; they do so in part by interpreting specific instances in light of the general case.”\textsuperscript{27}

Before one can understand the significant impact that schemas have on jurors’ use of jury instruction, it is important to briefly recap the different types of schemas, as well as how people use them to interpret information. People have schemas for everything, including themselves, other people, the roles people play in society, and different types of events or activities.\textsuperscript{28} Furthermore, both priming and framing influence which schemas will be activated and applied in any given situation.\textsuperscript{29} Finally, once established, schemas persevere, sometimes even in the face of conflicting or contradictory information.\textsuperscript{30}

\textbf{A. Different Types of Schemas: Self, Person, Role & Event}

Most social science research focuses on four main categories of schemas: self (information about ones’ own personality, appearance, and behavior), person (information about the traits and goals of others), role (information about the role someone plays in society, such as age, race, sex, or profession) and event or scripts (information about what usually happens in a particular setting or event).\textsuperscript{31} All of these schemas influence and guide how we perceive, remember, and make inferences about new information.\textsuperscript{32}

\textsuperscript{25} PAUL BREST & LINDA HAMILTON KRIEGER, PROBLEM SOLVING, DECISION MAKING, AND PROFESSIONAL JUDGMENT: A GUIDE FOR LAWYERS AND POLICY MAKERS 18 (Oxford Univ. Press 2010).
\textsuperscript{26} BREST & KRIEGER, at 18
\textsuperscript{27} FISKE & TAYLOR, at 141.
\textsuperscript{28} FISKE & TAYLOR, at 149.
\textsuperscript{29} FISKE & TAYLOR, at 181.
\textsuperscript{30} FISKE & TAYLOR, at 171.
\textsuperscript{31} FISKE & TAYLOR, at 149
\textsuperscript{32} FISKE & TAYLOR, at 150.
How a person sees themselves and what they feel their personality is depends on their self-schema—the beliefs and ideas people have about themselves.\textsuperscript{33} People are either schematic or aschematic on particular attributes or personality dimensions.\textsuperscript{34} If an attribute is important to someone, or they think of themselves as embodying strong components of that trait (“I am very political” or “I am outgoing”), they are said to be schematic as to that attribute. Conversely, if the person does not have a strong view of themselves in regards to a particular trait, or it is less important to them (“Being athletic is not important to me—I don’t think about it one way or another.”), they are aschematic as to a particular trait. Like other schemas, once formed, self-schemas are resistant to change.

Unlike self-schemas, person schemas organize our knowledge about other people. Person schemas are generally broken down into personality traits and goals, both of which determine what information is relevant to a given person or type of person.\textsuperscript{35} For example, a schema for the trait “brave” might include what brave people do (charge into burning buildings) and examples of brave people (police officers, World War II resistance fighters). Goal schemas are a joint function of the goals dictated by a specific situation, and how those possible goals fit the particular person in the situation.\textsuperscript{36}

Role schemas organize our knowledge about the roles people play in society and our expectations for appropriate behavior based on those roles.\textsuperscript{37} For example, someone would expect her accountant to ask to see a copy of her prior tax returns, but she would be surprised if her doctor made the same request; conversely, she would be shocked if her accountant attempted to take her temperature. The characteristics that shape role schemas can develop through the effort or achievement of the individual (\textit{e.g.}, a person’s experience or profession), or through immutable characteristics (\textit{e.g.}, race, sex, or age). All of these characteristics have corresponding role-based expectations for appropriate behavior, organized in the observer’s mind as role-schemas.\textsuperscript{38}

\textsuperscript{33} ZIVA KUNDA, SOCIAL COGNITION: MAKING SENSE OF PEOPLE 452 (MIT Press 1999).
\textsuperscript{34} KUNDA, at 453.
\textsuperscript{35} FISKE & TAYLOR, at 150.
\textsuperscript{36} FISKE & TAYLOR, at 150.
\textsuperscript{37} FISKE & TAYLOR, at 159.
\textsuperscript{38} FISKE & TAYLOR, at 160. A stereotype is a type of role schema, one that comprises our knowledge, beliefs and expectations about a particular social group.\textsuperscript{36} David L. Hamilton & Jeffrey W. Sherman, Stereotypes, in HANDBOOK OF SOCIAL COGNITION 168 (Wyer & Srull eds., 2d ed. Hillsdale, NJ 1994). Social stereotypes exist for all groups, not just
Event schemas, also known as scripts, are structures that describe the appropriate or expected sequence of events in well-known situations like a visit to a doctor’s office, to a restaurant, or to a sporting event. These schemas contain beliefs about the sequence of actions and events that typically happen in particular situations; they allow us to abstract procedures and complex sequences of behaviors from our everyday experiences and apply those to our understanding of new experiences. In one study designed to determine if there were widely shared scripts for different types of robberies, subjects were asked to write a list of actions describing a typical act of a robbery of a convenience store. 96% included “enter store,” 90% included “look around (once in store),” 90% included “go to the cash register,” 99% include “demand money,” and 96% included “exit store.” A majority of the subjects in the study therefore held similar beliefs about the sequence of actions that typically occurred in a convenience store robbery.

The research on schemas—whether self, person, role, or event—indicate they all affect our perception of new information, our inferences based on that information, and our memories and retrieval of stored information. “Schema guide our information seeking. Not only do schema tell us what to see, but they also tell us where to see it.” We do not notice or attend to all of the information we encounter, but only deal with that which is important or useful, and schemas tell us what is important or useful. Next, schemas allow us to draw inferences about what happened in the past, and what is likely to happen in the future. Finally, schemas help determine what we remember about what happens

rational minorities, and correspond to the beliefs and expectations we have about that particular group. We have role schemas and stereotypes for teachers, gang members, ball players, religious fundamentalists, and politicians. Once a person is categorized, he or she becomes another example of the schemas, and is assigned the characteristics and traits of others within their same social group. Fiske & Taylor, at 161.

40 Mandler, at 75.
42 Holst & Pezdek, at 578-79.
43 Fiske & Taylor, at 150.
46 Taylor & Crocker, at 97-98
around us; we are more likely to remember schemas relevant or consistent information and to disregard that which does not fit into an existing schema.47

B. Schema Activation: Priming and Framing

Once schemas have developed, they are available for use in new situations; they exist in a sort of resting state, waiting to be cued.48 But what determines which of the many relevant and available schemas will be activated in a particular situation? When meeting a new co-worker, a person could characterize her as a Southerner, a professor, a woman, or a colleague. Although she may be all of these things, a variety of factors influence the schemas that will be activated and applied when she meets the new co-worker, among them the recency with which a schema has been activated in the past and the frequency with which it has been activated (the priming effect),49 and the way in which the encounter has been framed.50

Priming has a powerful influence on which schemas are activated in particular situations. Priming refers to the idea that a recently and frequently activated idea will come to mind more easily than those which have not been activated.51 Similarly, schema activation is determined partly by how recently or frequently a particular schema has been activated in the past.52 Moreover, once a schema is activated or “primed” for one purpose, it becomes more accessible, and its likelihood of being used in the interpretation and organization of subsequent information is similarly increased.53

Exposure to words, people, or physical objects can activate schemas, even without the perceiver’s conscious awareness.54 In one study,

47 Taylor & Crocker, at 98.
48 FISKE & TAYLOR, at 175.
49 Thomas K. Sruss & Robert S. Wyer Jr., The Role of Category Accessibility in the Interpretation of Information About Persons: Some Determinants and Implications, 37 J. PERSONALITY & SOC. PSYCHOL. 1660, 1661 (1979); see also FISKE & TAYLOR, at 181.
50 FISKE & TAYLOR, at 231.
51 FISKE & TAYLOR, at 231.
52 FISKE & TAYLOR, at 181.
53 Sruss & Wyer, at 1661 (noting that once a schema is activated, “its accessibility, and thus its effect on the interpretation of subsequent information, is likely to decrease over time.”)
54 BREST & KRIEGER, at 315. Of course, listeners can be primed by more than one message. If a listener is more influenced by the first message she hears, this is the result
subjects believed they were participating in a sentence scrambling exercise. Subjects were first told to ask the experimenter for a second task after they had completed the sentence scramble. \(^{55}\) Researchers then primed the subjects with words associated with being “rude” (e.g., aggressively, disturb, intrude, obnoxious, bluntly), words associated with being “polite” (e.g., respect, unobtrusively, cordially, behave), or neutral words (e.g., send, clear, gives, flawlessly, practiced). \(^{56}\) Researchers measured how many seconds it took the subjects to interrupt a conversation between the experimenter and a confederate and ask for the second task. \(^{57}\) The subjects exposed to the rude priming conditions interrupted significantly faster (326 seconds) than the participants in the polite (558 seconds) or neutral (519 seconds) groups. \(^{58}\) In a similar study, participants exposed to words related to the elderly (e.g. Florida, bingo, retired) were timed walking to the elevator after completing the sentence scramble; subjects exposed to the elderly prime walked more slowly than those exposed to neutral words (e.g. thirsty, clean, private). \(^{59}\) The words, therefore, activated schemas that in turn actually influenced the behavior of the subjects.

Like priming, the framing of information activates schemas that influence the categories we apply and the inferences and decisions we make. “Framing is the process by which a communication source constructs and defines a social or political issue for its audience.” \(^{60}\) Cognitive linguist George Lakoff’s alternate definition of frames is closer

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\(^{56}\) Bargh et al., at 234.

\(^{57}\) Bargh et al., at 234.

\(^{58}\) Bargh et al., at 234.

\(^{59}\) Bargh et al., at 236.

\(^{60}\) Thomas E. Nelson et al., *Toward a Psychology of Framing Effects*, 19 POL. BEHAVIOR 221, 221(1997).
to a traditional definition of schemas: “the mental structures that allow
human beings to understand reality—and sometimes to create what we
take to be reality.”61 People use frames to understand the facts they
encounter; as Lakoff notes, “facts need a context.”62 Frames help give
context to and influence our understanding of everything from social
institutions (in a frame for a local school board, there are elected officials
who make important decisions about educational policy), to individual
words (“pro choice” or “pro life”). The activation of a particular frame can
predispose people to particular preferences and decisions.63

Frames also help shape and define issues. “An issue defining frame
characterizes the problem, assigns blame, and constrains the possible
solutions; … [they] block relevant concerns if those concerns are outside
of the frame.”64 Is it a “war on terror,” or a “war for oil”? Framing played
a big role in shaping public opinion over the Obama Administration’s
proposed rule requiring religious-affiliated organizations’ insurance
companies to pay for free birth control for those organizations’ employees.
In one national poll, when asked if employers should be required to offer
free birth control to employees, respondents favored the rule by a margin
of 53% to 33%.65 But when the same respondents were asked whether the

61 George Lakoff, Discussion Essay Frames and Brains, in Thinking Points:
Communicating Our American Values and Vision Ch. 3, p. 1 (Rockridge Institute
(last visited Aug. 4, 2012); see also Danielle Kie Hart, In A Word, 41 SW. L. REV. 215, 216
(2012), noting that the definition of the word “framing” is quite varied: “A “frame” is
variously defined as: a “structured understanding[] of the way aspects of the world
function[;]” “an interpretive schema that “enable[s] individuals ‘to locate, perceive,
identify, and label’ occurrences within their life space and the world at large[;]” “a
central organizing idea for making sense of relevant events and suggesting what is at
issue[;]”” and ““a central organizing idea or story line that provides meaning”; it suggests
‘what the controversy is about, the essence of the issue[.]” At its most basic, therefore, a
“frame” is a tool that enables people to make sense of the world around them.” (internal
citations removed).

62 Lakoff, Thinking Points: Communicating Our American Values and Vision 10
(Rockridge Institute 2006), at http://www.cognitivepolicyworks.com/resource-
center/thinking-points/.

63 James N. Druckman, The Implications of Framing Effects for Citizen Competence, 23
Pol. Behav. 225, 228-29 (2001) (discussing Tversky and Kahneman’s experiment, in
which subjects changed their preferences for an identical program to combat a disease by
50% depending on whether the program was framed in terms of saving lives or the
number of people dying).

64 Lakoff, Discussion Essay Frames and Brains (section on issue framing).

65 Gerald Seib, Birth-Control Rule Debate Intensifying (Mar. 16, 2012), at
government should mandate that the Catholic Church and other religiously affiliated hospitals and colleges offer birth control paid for by the institutions’ insurance companies, respondents opposed the rule by a margin on 45% to 38%. In other words, when the issue was framed as one of access to birth control, respondents approved of the rule, but disproved of the same rule when it was framed as one of an attack on religious freedom.

The framing of an issue can constrain people’s abilities to solve problems, and jurors are just as susceptible to this effect as anyone else. As Brest & Krieger note, “[a] particular frame inevitably provides only one of a number of possible views of reality and implicitly blocks the consideration of alternative perspectives with other possible solutions.” The problem, as the authors describe it, is that the decision-maker thinks they are seeing all sides of the problem because the frame itself “is often invisible.” “You have the illusion that you’re seeing the world “just as it is,” and it is difficult to imagine that there could be another way to view it.”

C. The Perseverance Effect

Schemas are resilient; once formed, people’s beliefs about themselves, about others, and about the things they see in the world are often unaffected—or only slightly affected—by logical challenges. This is known as the “perseverance effect”: schemas help us more efficiently process information, and that benefit would be lost if people changed their schemas to fit every new situation. Once schemas are established, they persist, often even in the face of evidence to the contrary or instructions to disregard them, and there even appears to be a biological basis for this

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66 Id.
67 My own use of the words “access” and “attack” in this sentence further frame the issue.
68 BREST & KRIEGER, at 35.
69 BREST & KRIEGER, at 35.
70 BREST & KRIEGER, at 35. In discussing the effect of frames on outcomes, the authors describe an experiment where American college students, Israeli pilots, and their flying instructors played a Prisoner’s Dilemma type game, where participants choose whether to participate or defect. Those who were told the exercise was a “Wall Street Game” were more likely to defect than those who were told it was “Community Game.” Id. citing Varda Liberman et al., The Name of the Game: Predictive Power of Reputations Versus Situational Labels in Determining Prisoner’s Dilemma Game Moves, 30 PERSONALITY & SOC. PSYCHOL. BULL. 1175-85 (2004).
71 Craig A. Anderson, Inoculation and Counterexplanation: Debiasing Techniques in the Perseverance of Social Theories, 1 SOC. COGNITION, 126, 126 (year?).
72 FISKE & TAYLOR, at 171.
perseverance effect.

In fact, schemas persevere even when people are told the evidence in support of the schema is false. In a study demonstrating this effect, subjects were asked to review two suicide notes and determine which one was real and which was fake. After completing the task, the subjects were given false feedback; irrespective of actual performance, some were told they had performed much better than average, while others were told they performed the same as, or worse than average. The subjects were then “debriefed,” where “it was carefully explained that their putative performance had been determined before they entered the experiment, that they had received feedback unrelated to their actual performance, and that the deception had been necessary in terms of the purported rationale for the study.” Despite this thorough debriefing, subjects who were initially told they performed above average in the task continued to believe that their performance had been above average, and that their future performance on a similar task would similarly remain above average. In fact, “the greater the subject’s apparent initial success, the higher were the scores she estimated for past and future performances.”

Furthermore, when people draw causal connections among pieces of information, the perseverance effect becomes even stronger. In a study on debiasing, subjects were given case histories of two firefighters. Each case history included information about the firefighter’s preference for risk and his job performance. Some subjects were led to believe in a positive relationship between risk preference and firefighting ability (those with high risk preference were successful firemen and low risk preference were unsuccessful), while others were led

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74 Ross et al., at 880.
75 Ross et al., at 882.
76 Ross et al., at 884.
77 Ross et al., at 884.
78 Ross et al., at 884.
79 Craig A. Anderson, Inoculation and Counterexplanation: Debiasing Techniques in the Perseverance of Social Theories, 1 SOC. COGNITION 126 (year?).
81 Anderson, at 127.
82 Anderson, at 127.
to believe in a negative relationship (those with high risk preference were unsuccessful, while those with low risk preference were successful). Subjects then wrote an explanation of the relationship they had learned about.

When later debriefed and told that the case histories were fictitious and there was no relationship between risk preference and success as a firefighter, subjects continued to hold their initial beliefs—those initially told of a positive relationship tended to keep that belief, and those initially told of a negative relationship were more likely to keep that belief, even in the face of disconfirming evidence. More significantly, however, subjects whose explanations referred to causal scenarios (i.e., “firefighting is risky, so people who prefer risk will be better firefighters.”) displayed more perseverance in their initial theories than those whose explanation just restated the information in the case history.

This perseverance effect is so strong that when faced with information that might challenge their existing schemas, people tend to ignore those inconsistencies or exceptions, or devote less attention to examining the contradictory information. In other words, “when we come across evidence that supports our desired conclusions, we may accept it at face value. But when we come across comparable evidence that challenges our desired conclusions, we may evaluate it more critically and work hard to refute it.” In a study examining this effect, opponents and proponents of capital punishment read about two studies: one suggested that capital punishment was effective as a deterrent, and the other that it was not effective. Both opponents and proponents of capital punishment thought the study that confirmed their beliefs was more

83 Anderson, at 127.
84 Anderson, at 127.
85 Anderson, at 127.
90 Charles G. Lord et al., *Biased Assimilation and Attitude Polarization: The Effects of Prior Theories on Subsequently Considered Evidence*, 37 *J. Personality & Soc. Psychol.* 2098, 2100 (1979). Each argument included a description of the design of the study, and was followed by criticisms of the study itself, and rebuttals of those criticisms. *Id.* at 2101.
effective than the study that disconfirmed their beliefs.\textsuperscript{91} In a similar study, researchers found that when examining evidence that is incompatible with their prior beliefs, people invest greater effort in evaluating the incompatible evidence than in evaluating any compatible evidence, and that they devote their effort toward refuting arguments challenging their own position.\textsuperscript{92}

Furthermore, telling people to disregard schemas, or attempting to prevent schema activation, does not appear to diminish the effect of schemas on decision-making.\textsuperscript{93} In a study examining this effect, Vicki Smith attempted to prevent schema application by withholding from jurors the name of the crime with which the defendant was charged.\textsuperscript{94} Smith’s hope was that without the retrieval cue (the name of the crime), the subjects would not be able to access schemas about that crime and would have to rely on the jury instructions for guidance.\textsuperscript{95} The results showed, however, that when jurors were not given the crime name, they simply applied their own crime name and accessed their schema for that crime.\textsuperscript{96} In the same study, Smith explicitly told jurors to disregard their preexisting notions of the crime, and only rely on the judge’s instructions.\textsuperscript{97} This did not work, either. The instruction had no effect on decision-making and subjects relied on their preexisting knowledge of the crime when they heard this instruction as when they did not.\textsuperscript{98}

\textsuperscript{91} Furthermore, “the net effect of exposing proponents and opponents of capital punishment to identical evidence—studies ostensibly offering equivalent levels of support and disconfirmation—was to increase further the gap between their views.” Lord et al., at 2105.

\textsuperscript{92} Kari Edwards & Edward Smith, \textit{A Disconfirmation Bias in the Evaluation of Arguments}, 71 J. PERSONALITY & SOC. PSYCHOL. 5, 14 (1996). This result is known as the “prior belief effect.” Id. at 5.


\textsuperscript{94} Smith, at 532.

\textsuperscript{95} Smith, at 532.

\textsuperscript{96} Smith, at 532.

\textsuperscript{97} Smith, at 532.

\textsuperscript{98} Smith, at 532; \textit{see also} Anderson. In his discussion of the results of the firefighter experiment, discussed \textit{infra} at note \textsuperscript{____}, Anderson noted that we could try to prevent jurors from creating causal explanations or theories, but, such as suggestion is as undesirable as it is impossible. Many of our theories are quite useful, both as information organizers and as predictive tools. The problem lies not in our propensity to create theories, but in our underestimation of how easy it is to create plausible theories for any particular set of events we wish to explain.

\textit{Id.} at 128.
Finally, it seems that the perseverance effect may be biologically based. In a 2005 study, researchers wanted to determine the extent to which people pay attention to and assimilate evidence that is consistent with their beliefs about the objects under consideration, and the extent to which they treat inconsistent evidence as erroneous. Previous studies in behavioral and cognitive neuroscience indicated that different brain networks are invoked during learning, and during error detection and conflict monitoring. The authors found that when people considered evidence that was consistent with their beliefs, brain regions associated with learning and memory were significantly activated, and when the evidence was inconsistent with people’s beliefs, areas associated with error detection and conflict resolution were activated. From this, the authors concluded that people’s beliefs and expectations may act as a “biological filter,” causing the person to employ learning mechanisms when confronted with evidence consistent with their beliefs, and error detection mechanisms when that evidence is inconsistent.

That jurors do not evaluate evidence in a vacuum will come as no surprise to judges or lawyers, or to anyone who has served on a jury. What is perhaps more surprising is that this inability to separate personal beliefs from evidence is so pervasive and in fact has a neural signature, and that people, therefore, may be unable to set aside beliefs and expectations when making decisions or judgments. Furthermore, other findings have

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99 Researches have recently been able to expand the scope of the study of decision-making using advanced functional brain imaging techniques, including functional magnetic resonance imaging (fMRI). Using these new techniques, researches can observe first-hand how the brain responds during complex reasoning. Jonathan A. Fugelsang & Kevin N. Dunbar, A Cognitive Neuroscience Framework for Understanding Causal Reasoning and the Law, in LAW AND THE BRAIN 161 (Semir Zeki & Oliver Goodenough, eds., Oxford Univ. Press 2006). In these studies, subjects typically participate in one task that involves a specific reasoning process (deductive reasoning or analogical reasoning), and a second control task that contains most of the same visual and cognitive stimulation, but not the specific reasoning process. Researchers can then contrast the areas of the brain activated during the specific reasoning task and the control task to measure unique brain activity associated with the specific reasoning task. Id. Fugelsang and Dunbar approached their research slightly differently by using fMRI to examine the areas of the brain that are activated when subjects are presented with evidence that is either consistent or inconsistent with their own beliefs. Id.

100 Fugelsang & Dunbar, at 161.

101 Fugelsang & Dunbar, at 161 (citing various studies).

102 Fugelsang & Dunbar, at 161 (citing various studies).

103 Fugelsang & Dunbar, at 162.

104 Fugelsang & Dunbar, at 162.
demonstrated that people may be similarly unable to measure the extent to which beliefs and expectations influenced their evaluation of statistical evidence.  

II. WHY WE NEED TO GO BEYOND “PLAIN-LANGUAGE” INSTRUCTIONS

Because most jurors have some prior knowledge of the law (and because some may have quite a bit), they approach jury instructions with an established schema in place—though it may not be a legally correct schema—and their interpretation of the instructions they receive is necessarily influenced by that schema. For example, when people in a study were asked to list characteristics of robbery, 75% said that “something of value is taken,” 73% said that the “perpetrator is armed,” and 31% said that the crime “occurs in a home/apartment.” Robbery does involve the taking of property from the victim by force or threat of force, but does not require that the property be valuable, that the perpetrator be armed, or that the location be someone’s home. An individual juror might therefore have a schema for robbery that includes an armed perpetrator. Because of the perseveration effect, that schema will influence the facts the juror notices and remembers when she is presented with the evidence, and the schema will not always go away when the juror enters the jury room to make a decision, even if before she begins deliberations, the juror has been given plainly written jury instructions that do not include an armed perpetrator.

Moreover, because the average juror has little experience in “the law,” even plain-language instructions can contain unfamiliar terms, or terms used in a way with which the juror has no experience, so the juror has an additional hurdle: she must first familiarize herself with the “official” use of legal language, before she can begin to interpret the plain-language instructions she has been given. This is especially difficult in law because precise language is so important; judges and lawyers share a common language gained through legal education and practice, but jurors often lack that shared understanding, and instead incorporate their everyday knowledge and understanding of concepts into their

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105 Fugelsang & Dunbar, at 163.
107 Smith, at 861.
108 See Diamond & Casper, supra note ____.
interpretation and application of legal rules to the facts of a particular case.\(^{110}\)

Furthermore, some concepts in the law function as “intermediate” concepts, which means that their meaning is flexible and determined by the situation, or the facts.\(^{111}\) For example, the legal term “ownership” means different things in the context of ownership of money from an inheritance (which obliges the owner to pay inheritance taxes), and the context of ownership of a bike received as a birthday present (which does not oblige the owner to pay taxes). The context (facts) determine the legal result and corresponding rights and responsibilities. Moreover, the individual juror likely has a schema for ownership that is different than either of these legal definitions. Similarly, because jurors are presented with arguments from all sides of an issue, in an adversarial setting, the language and concepts they are expected to understand is fluid, and can often be interpreted in different ways. Schemas further compound this interpretative problem because they influence the jury at every stage of the trial, from the attention jurors give the evidence and how they interpret the information they see at trial, to the way they interpret and apply the jury instructions to that information.

While rewritten jury instructions have improved juror comprehension, schema theory, and specifically the perseverance effect, tells us that jurors will still apply existing schemas to those rewritten instructions.\(^{112}\) Interestingly, there is little in the social science literature examining the impact of schemas on jury decision-making when jury instructions have been rewritten and made clearer. In one of the few studies examining schemas and jury instructions, Vicki Smith concluded that poor juror comprehension was not the result of poorly drafted

\(^{110}\) Dan Simon’s scholarship on cognitive coherence suggests that when jurors are asked to apply instructions they cannot understand to a set of ambiguous facts, jurors will seek to impose coherence on the complex task in front of them. Dan Simon, *A Third View of the Black Box: Cognitive Coherence in Legal Decision Making*, 71 U. CHI. L. REV. 511, 517 (2004). In doing so, they will reduce the decision to one of two alternatives, one of which is supported by strong considerations and one by weak consideration. *Id.* at 516. “Coherence-based reasoning posits that the mind shuns cognitively complex and difficult decision tasks by reconstructing them into easy ones, yielding strong, confident conclusions.” *Id.* at 513. In other words, instead of attempting to decipher confusing and complex instructions, jurors will instead distill the decision into a simpler one, about which they can feel more confident.

\(^{111}\) Nievelstein et al., at 1047.

instructions, but the result of the jurors’ prior knowledge of the law and preexisting knowledge frameworks (schemas) interfering with those instructions. 113 Jurors did not discard these frameworks when presented with conflicting jury instructions, but instead relied on them in making a decision. 114 That study was later criticized by Peter English and Bruce Sales, who argued that the study presented participants with standard pattern jury instructions, instead of instructions that had been rewritten to increase comprehension. 115 English and Sales concluded that while jurors may rely in part on schemas when given incomprehensible instructions, the study did not show that jurors will do this when given instructions revised according to psycholinguistic principles. 116 In other words, given clear instructions, they concluded, perhaps jurors would be more likely to follow the law rather than their preexisting ideas. 117

Other researchers have used schemas to explain jury decisions, even though juror comprehension of instructions was not controlled. 118 In one study, mock jurors given “not guilty by reason of insanity” instructions were no more likely to convict or acquit than jurors told to rely on common sense. 119 The authors concluded that this was the result of the jurors’ “preconceived constructs or beliefs” (schemas) about sanity and insanity. 120 These constructs, the authors felt, were very strong, and often more powerful than any new information the jurors might learn about through jury instructions. The authors suggested that drafters should pay attention to these constructs and develop a new insanity test that incorporates both psychological and legal definitions of insanity, as well as “commonsense beliefs.” 121

113 Vicki L. Smith, Prototypes in the Courtroom: Lay Representations of Legal Concepts, 61 J. PERSONALITY & SOC. PSYCHOL. 857, 868 (1991). Smith argued that jurors have preexisting mental representations of the elements of various crimes, but that those concepts do not include the correct legal definitions of the crimes. See, e.g., robbery example, supra note ____.
114 Smith, at 868.
116 English & Sales, at 390.
117 English & Sales, at 390.
119 Finkel & Handel, 1988, at 76-77.
120 Finkel & Handle, 1988, at 76-77.
121 Finkel & Handel, 1988 & 1989. In a similar study, James Ogloff attempted to determine whether jurors used preexisting schemas in determining what elements are
Finally, one study suggests that jurors will continue to adhere to preexisting ideas (schemas) even when instructions are written clearly. In that study, researchers compared rates of death sentences when jurors were told that if a defendant were not sentenced to death, he would either spend an unspecified amount of time in prison, or he would receive life without the possibility of parole (LWOP). Although the authors expected to find fewer death sentences in the LWOP condition (because jurors could be certain that defendants would not go free), the frequency of death sentences was almost identical in the two conditions. Data from a manipulation check suggested that the LWOP instruction was clear, but it appeared that jurors who were told the defendant would receive LWOP relied on their preexisting beliefs that LWOP did not really mean a life sentence. This prior belief was so strongly held that jurors discounted even a clear jury instruction to the contrary.

Of course, even rewritten jury instructions have a potential vulnerability. As Smith points out, “[c]olloquial terms carry colloquial baggage, some possibly correct, some incorrect. Wholesale replacement of legal terms with simple language may activate a host of associated
concepts that are useful for everyday decision-making but are legally incorrect or irrelevant.”

III. THE IMPORTANCE OF THE REPRESENTATIVE JURY, AND SPECIAL JURIES AND A MODEL FOR IMPROVEMENT

The term “American jury system” of course includes many such systems. Each state, the federal government, and the District of Columbia has its own courts, laws, and practices, with multiple jury systems. Moreover, jury systems differ in criminal cases and civil matters. All of these systems, however, do share some important characteristics. The Sixth Amendment to the Constitution provides that “In all criminal prosecutions, the accused shall enjoy the right to a speedy and public trial, by an impartial jury of the State and district wherein the crime shall have been committed.” In civil cases in federal court, the right to a jury trial is governed by the Seventh Amendment, which provides that “In Suits at Common Law, where the value in controversy shall exceed twenty dollars, the right of trial by jury shall be preserved…” This constitutional right to a jury trial in civil cases only applies to federal cases, but most states do afford jury trials in civil matters for cases above the level of the small claims court.

A fundamental feature of the trial by jury is the requirement that the pool of potential jurors should be comprised of a reasonable cross-section of the community, or a “jury of peers.” Stemming from the Magna Carta, this ancient notion continues to reverberate today and has many goals, among them improving fact-finding, reducing prejudice, and

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127 Vicki L. Smith, Prototypes in the Courtroom: lay Representations of Legal Concepts, 61 J. PERSONALITY & SOC. PSYCHOL. 857, 869 (1991). Smith’s findings and conclusions were criticized by Peter English and Bruce Sales in their article, A Ceiling or Consistency Effect for the Comprehension of Jury Instructions, 3 PSYCHOL. PUB. POL’Y & L 381 (1997), see supra notes _____, for discussion of these critiques.
129 U.S. CONST. amend VI. The Supreme Court has limited this right by holding that the Sixth Amendment does not guarantee jury trials for “petty” offenses, or those carrying a potential punishment of less than six months’ imprisonment. See Baldwin v. New York, 399 U.S. 66 (1970). Since 1968 this constitutional right to a jury trial has applied to both state and federal criminal trials. Duncan v. Louisiana, 391 U.S. 145 (1968).
130 U.S. CONST. amend VII.
132 The Magna Carta required that charges against barons should be heard by other barons, their “peers,” rather than by the king. VIDMAR & HANS, at 66.
promoting the legitimacy of the legal system. In 1968, the Supreme Court noted that, “Providing an accused with the right to be tried by a jury of his peers gave him an inestimable safeguard against the corrupt or overzealous prosecutor and against the compliant, biased, or eccentric judge.” In practice, of course, this ideal has often fallen short. Women and minorities have historically been excluded from juries, and only began serving in substantial numbers in the latter half of the twentieth century. Moreover, until the second half of the twentieth century, jury service was limited to land owners, further limiting the number of eligible jurors.

Despite this shaky start, the county eventually moved toward a representative jury, one “drawn from a cross-section of the community.” This egalitarian tradition of a jury composed of a cross-section of the community argues against juries with special skills or special qualifications, though there are examples of such “special juries.” A special jury is one composed of citizens with relevant specialized knowledge that will help them to more efficiently solve the facts of a case. The earliest known special jury was in 1351, when a jury composed of cooks and fishmongers was called to decide the case of a defendant charged with selling bad food. Another well-known form of the special jury was the “jury of matrons,” all-woman juries assembled in cases in which a convicted woman awaiting execution “pleaded her belly,” or claimed to be pregnant. The jury of matrons determined the truth of the claim and decided whether the execution should be stayed until the child was born.

The idea of using experts to resolve disputes has an extensive history in the United States. Arbitrators are perhaps the best-known example, but experts also make decisions as administrative judges and in

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133 Vidmar & Hans, 76.
135 Vidmar & Hans, 71-74.
138 For an excellent discussion of the historical development and current status of the special jury, see James C. Oldham, Trial by Jury: The Seventh Amendment and Anglo-American Special Juries (New York Univ. 2006).
139 Vidmar & Hans, 68.
140 Vidmar & Hans, 68.
141 Vidmar & Hans, 68.
142 Vidmar & Hans, 68. The use of special juries was fairly common in England in the 1970s, but their use declined and they were abolished in 1949. Id.
specialty courts. There is also a large body of legal literature discussing the constitutionality of dispensing with the jury in complex civil litigation and instead employing special juries. Although at one time about half of the states had some form of special jury statute, today only Delaware has a specific statute allowing the use of special juries in complex civil cases, though even there it has become exceedingly rare to call a special jury; many special jury requests are rejected because of “insufficient complexity.” Even a Delaware court noted that special juries are “contrary to fundamental concepts of jury trial and would substitute a method of selection which is inconsistent with established principles of justice.”

As James Oldham notes, “the idea of drawing exclusive special juries from specialized lists seems to be anachronistic today. Elite special juries surely are antithetical to the hard-fought, long-delayed goal of opening up jury service to everyone.” Oldham argues that there is still a place for special juries, however, and that while the cross-section requirement meets the goal of keeping citizens involved “in the business of democracy,” the special jury serves equally compelling goals, such as dealing effectively with complex cases. However, he does concede that, for the most part, the argument that a “complexity exception” can be read into the Seventh Amendment has not succeeded.

In addition to the constitutional hurdles, specialized juries composed of experts, and not of lay jurors, goes against our ideals of a

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143 OLDHAM, at 196. Neither private arbitrators nor administrative judges must submit questions of fact to a jury, though specialty courts still must do so. Id.
145 OLDHAM, at 199.
147 OLDHAM, at 177.
148 OLDHAM, at 177.
149 OLDHAM, at 196. Of course, the complexity exception is not without its supporters. Notably, Judge Richard Posner has stated that he would favor a complexity exception in certain “complex commercial cases.” He continued: “It’s unfair really to put people through the task of trying to understand a subject which people of higher education and intellectual attainment spend a lifetime studying with imperfect understanding.” See Jeffrey Cole, Economics of Law: An Interview with Judge Posner, 22 LITIG. Fall 1995, at 66-67.
representative “jury of peers.” The representative jury is based on the premise that the ordinary citizen is capable of sorting out the details of most lawsuits. As Vidmar & Hans note, “the idea of a representative jury is a compelling one. A jury of people with a wide range of backgrounds, life experiences, and world knowledge will promote accurate fact-finding.”\textsuperscript{150} Diverse groups are likely to hold diverse perspectives on the evidence, and therefore encourage more thorough debate.\textsuperscript{151} Moreover, research suggests that diverse juries are better fact-finders.\textsuperscript{152}

Abandoning the representative jury system in favor of a system of special juries of experts is an extreme solution, and one that is unlikely to find broad support in the courts. Furthermore, there are great benefits to a representative jury that would be lost in such a system. A compromise position, therefore, is a representative system that attempts to create “experts” out of lay jurors. We can come closer to achieving this ideal by attempting to correct and develop the schemas jurors bring with them to trials in order to make their decision-making process more like that of legal experts.

IV. RECOMMENDATIONS: HOW TO CORRECT OLD SCHEMAS AND CREATE NEW ONES

Findings in social science suggest that jurors bring with them to trials existing schemas for legal concepts, many of which may be incorrect or undeveloped.\textsuperscript{153} Furthermore, jurors are not typically aware of the extent to which these schemas can influence their decision-making. Because—plain or not—jurors cannot separate schemas from their use of jury instructions, the goal of jury instructions should be two-fold: first, to give jurors the applicable law; and second, to help jurors correct existing schemas and develop new and legally correct schemas before jurors are exposed to the evidence in a trial.

We do not—and should not—expect jurors to entirely remove past experience and common sense from the equation when making decisions about verdicts. In fact, we instruct jurors to do just that in certain contexts; for example, jurors are told to use common sense in judging the credibility

\textsuperscript{150} Vidmar & Hans, 74.
\textsuperscript{151} Vidmar & Hans, 74.
\textsuperscript{152} Vidmar & Hans, 74, citing various studies.
Moreover, studies of jury behavior indicate that such beliefs often do play a role in the jury deliberation process.155 “[I]t is naive in the extreme to act on the premise that jurors close their eyes and minds to matters that are commonplace in their lives.”156 However, because many jurors have undeveloped or incorrect schema for legal concepts they will be asked to apply in a trial, we should correct jurors’ misunderstandings on the law and create legally appropriate and accurate schemas before jurors are told about the facts of the case. To do this, we need to efficiently train jurors to use the law and facts and educational psychology can help inform this effort. Additionally, we can help jurors overcome the schema perseverance effect and reduce bias by asking them to be aware of their own decision-making process.

A. Expert v. Novice Schemas

In many cases, jurors have little legal knowledge, or limited exposure to legal concepts through television and movies.157 So while these legal “novices” have schemas as to ideas and concepts they have encountered in the past, they will not typically have appropriate schemas158 for any of the legal concepts or rules they will hear during a

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154 See, e.g., Massachusetts Criminal Model Jury Instructions (Jurors are instructed to “look at all the evidence, drawing on your own common sense and experience of life.”) Massachusetts Criminal Model Jury Instructions, Credibility of Witnesses, Instruction 2.260 (Jan. 2009).
155 In interviews of jurors in 16 civil cases and seven criminal cases, one researcher found that “particularized knowledge or experience” affected the in eight of the 16 civil cases, though not in any of the seven criminal cases. Dale W. Broeder, Occupational Expertise and Bias as Affecting Juror Behavior: A Preliminary Look, 40 N.Y.U. L. REV. 1079, 1080 (1965). Moreover, in a study of simulated jurors’ deliberations in response to a criminal homicide case, personal experiences were rarely discussed. Reid Hastie et al., at 84.
157 Of course, this is not always the case. In many states, even judges are required to sit on juries when called, though they are sometimes granted hardship exemptions. Jean Guccione, More Judges Answering Call for Jury Duty, L.A. Times, June 3, 2001, available at http://articles.latimes.com/2001/jun/03/local/me-6028. Most notably, Justice Elena Kagan was recently called for jury duty in DC Superior Court, though her number was not called and she was released from service. Keith Alexander, Elena Kagan Not Selected for Jury Duty, Wash. Post, Jan. 20, 2011, available at http://voices.washingtonpost.com/crime-scene/keith-l-alexander/elena-kagan-reports-for-jury-d.html. This practice raises other issues of “strong” jurors and their impact on juror decision-making that are beyond the scope of this Article.
158 Though they may have inappropriate schemas gleaned from television and other sources. Much has been made in the law and the media of this “CSI effect.” See, e.g.,
trial; this is in contrast to the judge and lawyers, and often the parties, who will have more developed schemas for the concepts in the trial. Generally, well-developed schemas (expert schemas) tend to be more complex and better organized, and therefore more accessible, allowing for more thoughtful judgment and better decision-making.\(^{159}\)

Mature schemas are likely to be more complex and more organized than immature ones.\(^{160}\) In a study investigating how conceptual knowledge structures (or schemas) differ between novices and experts, researchers compared the approaches of novices (first-year law students) and experts in civil law to two tasks, a card-sorting task and a concept-elaboration task.\(^{161}\) The card-sorting task, which asked participants to sort different cards into groups based on different legal concepts, was designed to provide insight into “differences in the organization of conceptual knowledge of individuals at different levels of expertise.” The concept-elaboration task, which asked participants to list everything they knew about a particular topic in a short amount of time (2-3 minutes), was designed to provide insight into the participant’s depth of knowledge about the concepts and associations they made with other concepts.\(^{162}\)

As expected, the experts’ schemas were highly developed and elaborate, which allowed them to “effectively and efficiently interpret information or problems [they were] confronted with.”\(^{163}\) In contrast, the novices, who lacked these developed mental frameworks for the law, employed problem schemas that consisted of “loosely linked, incomplete, and sometimes incorrect knowledge.”\(^{164}\) The novices’ schemas were also less easily activated than the experts’, and when activated, were less efficient at problem solving.\(^{165}\) “All other things being equal, greater

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\(^{159}\) FISKE & TAYLOR, at 173.

\(^{160}\) FISKE & TAYLOR, at 173.


\(^{162}\) Id. at 1047-48.

\(^{163}\) Nievelstein et al., at 1046.

\(^{164}\) Nievelstein et al., at 1046.

\(^{165}\) Nievelstein et al., at 1046. As expected, in the card-sorting task, experts used more central concepts when clustering concepts, while novices ordered their concepts more randomly. Id. at 1055. In the concept-elaboration task, experts used more legal definitions in their explanations of a particular concept, including examples from cases, while novices used more everyday examples. Id. at 1056.
complexity moderates judgment. The more variety one has encountered, the more complex the issues, the less clear-cut it all seems, and the less extreme one’s judgment.”

Knowledge, therefore, becomes more structured, and more accessible, with increasing expertise. When asked to group similar concepts in the card-sorting task, experts used the same central legal concepts to create clusters, while novices strung concepts together somewhat randomly, and reported no meaningful connections between the concepts. As a result of this better organization, experts notice, recall, and use information that is inconsistent with their schemas more than novices do. The novices’ simpler, less developed schemas limit them to more obvious, schemas-consistent material. This allows experts to better moderate inconsistencies, and make more focused judgments and decisions.

B. Developing Jurors’ Schemas to Make Them More Like Experts

Part of the goal of jury instructions, then, should be to develop novice jurors’ schemas for the legal concepts they are about to apply to the facts during the trial. We can increase efficient learning in several ways, both by giving jurors simple and straightforward explanations of the legal concepts they will be asked to apply, and by allowing jurors to study worked examples of those legal concepts and build new schemas before they are asked to interpret law and facts. In turn, these schemas will be more structured and more accessible to the jurors during the trial and during deliberations, leading to better judgment and better outcomes.

Juror schema development and learning must be efficient both because the nature of a trial does not allow for drawn-out juror education, but also because efficient learning leads to better learning outcomes with less mental effort. All human learning relies on both working memory

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166 FISKE & TAYLOR, at 173-74.
167 Nievelstein et. al., at 1058.
168 Nievelstein et. al., at 1058. This suggests that the schemas of novices, even when analyzing the same information, are very different from each other. Individuals with greater expertise in law, however, have a more similar knowledge base—and therefore more similar schemas—than those with less expertise. Id.
169 FISKE & TAYLOR, at 174.
170 FISKE & TAYLOR, at 174.
171 FISKE & TAYLOR, at 174.
172 RUTH CLARK ET AL., EFFICIENCY IN LEARNING: EVIDENCE-BASED GUIDELINES TO MANAGE COGNITIVE LOAD 27 (John Wiley & Sons 2006).
and long-term memory.173 When people are in learning mode, new information is processed in the working memory and forms schemas, which are then stored in long-term memory.174 Working memory is mainly a storage place for conscious processing; it does not have the capacity to store more than limited amounts of information.175 If we ask jurors to learn too much too quickly (i.e., all of the law and the facts they are being asked to interpret), we will overwhelm their working memory and shut down new learning.176 This is especially true because as novices, jurors have fewer developed schemas for the concepts they are learning, and can easily be overwhelmed with the cognitive demands of building new schemas.177

To help jurors counteract inappropriate preexisting schemas and activate legally appropriate schemas, we should provide them with pre-trial explanations of the applicable law. Traditionally, the only instruction jurors receive on the applicable law are the jury instructions themselves, and typical instructions are taken from statutes or cases; even pattern jury instructions intended to be clearer and more accessible for the average layperson, are still written by lawyers (experts) in language—even plain language—that makes sense to experts.178 But experts and novices do not deal with new information or learn in the same way, and when experts serve as instructors, “they often overload their learners by failing to compensate for the much more limited schemas of the learners.”179 Because the novice does not have relevant schemas, the pre-trial explanation should serve the role that schemas would serve for the expert, or the lawyers and judges.180

Moreover, this explanation should move beyond the jury instructions themselves and give new jurors a brief, introductory overview of the legal issues. The explanation should incorporate strategies for teaching novice learners, including things like organizing sentences that preview and then review the content; definitions and examples of unfamiliar terms; explicit statements that require minimal inferences; and

173 CLARK ET AL., at 28.  
174 CLARK ET AL., at 28.  
175 CLARK ET AL., at 29.  
176 CLARK ET AL., at 29.  
177 CLARK ET AL., at 32.  
178 Peter Tiersma, The Rocky Road to Legal Reform: Improving the Language of Jury Instructions, 66 BROOK. L. REV. 1081, 1088 (2001); 89 C.J.S. Trial § 809.  
179 CLARK ET AL., at 33.  
180 CLARK ET AL., at 251.
headers to signal paragraph topics. These “pre-instructions” will help give jurors an overview of the applicable law and help them redefine and better develop their schemas for the issues they are about to examine during the trial. As a result, jurors’ schemas will be more accessible, and jurors will be more flexible in their thinking and less swayed by unconscious bias.

Furthermore, novices will learn more efficiently if they are given worked examples, or a step-by-step-explanation of the solution to a problem, that help them build new schemas. Because novices lack

181 CLARK ET AL., at 259.
182 CLARK ET AL., at 32, 190. In fact, some states do include examples in some types of jury instructions. For example, the state of Connecticut explains the difference between direct and circumstantial evidence this way:

Circumstantial evidence of an event is the testimony of witnesses as to the existence of certain facts or evidence or the happening of other events from which you may logically conclude that the event in question did happen. By way of example, let us assume that it is a December night and you’re preparing to retire for the evening. You look out the window and you see it is snowing. You wake up the next morning, come to court, and testify that the night before it was snowing in the area of your house. That is direct evidence of the fact that it snowed the night before. You saw it and you came into court and testified to that fact.

Now assume that it is another December night, the weather is clear, there is no snow on the ground, and you retire for the evening. You wake up the next morning, you look out the window and you see snow on the ground and footprints across your lawn. You come into court and you testify to those facts. The evidence that the night before there was no snow on the ground and the next morning there was snow on the ground and footprints across your lawn is direct evidence. That direct evidence, however, is circumstantial evidence of the fact that some time during the night it snowed and that some time thereafter someone walked across your lawn.

State of Connecticut Criminal Jury Instruction 2.4-1, Direct and Circumstantial Evidence, at http://www.jud.ct.gov/ji/criminal/part2/2.4-1.htm (last visited Aug. 4, 2012). This is likely to be more helpful to a juror than the Ninth Circuit’s Pattern Criminal Jury Instructions, which provide:

Evidence may be direct or circumstantial. Direct evidence is direct proof of a fact, such as testimony by a witness about what that witness personally saw or heard or did. Circumstantial evidence is proof of one or more facts from which you could find another fact. You should consider both kinds of evidence. The law makes no distinction between the weight to be given to either direct or circumstantial evidence. It is for you to decide how much weight to give to any evidence.

schemas for new concepts, they need learning environments that compensate for that deficiency; this type of learning environment would provide schema substitutes by optimizing jurors limited working memories in ways that free working memory for learning. The use of examples is especially helpful for novice learners like the average juror, who knows little about the legal issue she is being asked to analyze, because the examples will help her develop schemas and accelerate expertise.\textsuperscript{183} If jurors have a worked example to study just prior to solving a similar problem (i.e. the problem of how the law applies to the particular facts in a trial), this will give them an analogy to use when solving the problem, thus freeing up more working memory capacity for schema development.\textsuperscript{184}

Arkansas Model Jury Instruction 501, which contains the pattern jury instruction for “proximate cause” is an example of a pattern jury instruction that could be rewritten to include both an introductory explanation to the legal issue, as well as worked examples of how the law would apply to a particular set of facts. The instruction states: “The law frequently uses the expression “proximate cause,” with which you may not be familiar. When I use the expression “proximate cause,” I mean a cause which, in a natural and continuous sequence, produces damage and without which the damage would not have occurred.”\textsuperscript{185}

Of course, “proximate” and “cause” are words that are familiar to most jurors, but the term “proximate cause” has a legal definition that is much different than its common usage. The legal concept of proximate cause is really one of policy, and whether there is enough of a connection between the act and the harm that it is fair to hold the defendant liable for the harm; to satisfy proximate cause, it must have been reasonably foreseeable that the harm would result from the action.\textsuperscript{186} Because of this difference between its common usage and its legal usage, jurors will likely

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\textsuperscript{183} Id. CLARK ET AL., at 193-94, 201.
\textsuperscript{184} Id. CLARK ET AL., at 193.
\textsuperscript{186} Palsgraf v. Long Island R. Co., 248 N.Y. 339, 352 (1928) (noting that “because of convenience, of public policy, of a rough sense of justice, the law arbitrarily declines to trace a series of events beyond a certain point.”)
\end{flushright}
need a corrected schema for this term, and examples of how the term plays out in the legal context will be helpful in creating a legally appropriate schema for “proximate cause.” Jurors should be told the rule and the reasoning for the proximate cause requirement and given an example of how the rule can be used to solve a specific problem:

**Rule and reasoning for “proximate cause”:** The next requirement for negligence is that the defendant’s action be the “proximate cause” of the plaintiff’s injury. Proximate cause means that at the time he took the action, the defendant must have been reasonably able to predict that the harm to the plaintiff would result from his action; in other words, the harm must have been reasonably foreseeable. This requirement is in addition to the requirement that the defendant’s actions be the “cause in fact” of the plaintiff’s injury (see previous instruction on “cause in fact”). We have this requirement because we do not think it is fair to hold people liable for every consequence of their actions, if that consequence is too improbable or far-reaching.

**You should find proximate cause in the following example:** If John throws a book at Steve’s head, it is reasonably foreseeable that John’s action could proximately cause Steve harm. Furthermore, if John throws a book at Steve’s head, but it misses, and knocks an object off of the shelf in back of Steve, which then hits Steve in the head, it is also reasonably foreseeable that John’s action could proximately cause Steve harm. Therefore, in both situations, when John threw the book, he proximately caused Steve’s harm.

**You should NOT find proximate cause in the following example:** John, driving carelessly, crashes into Steve’s car. John didn’t know that the car contained a bomb, which exploded when he hit it. Several blocks away, a mother carrying her baby, Betsy, is startled by the explosion and drops Betsy. In this situation, Betsy cannot recover against John because Betsy’s injury is so removed from John’s action that her harm was not reasonably foreseeable. John’s action was not the proximate cause of her injury. Note that in this example John has been negligent (because he was driving carelessly), and his careless driving is the “cause in fact” of Betsy’s injury (because if he hadn’t been negligent, the crash and the explosion would not have occurred). However, we do not want
to hold John liable for Betsy’s injury because it is so improbable and far-reaching that it would not be fair.\footnote{Palsgraf v. Long Island R. Co., 248 N.Y. 339; see also Steven L. Emanuel, Emanuel Law Outlines: Torts 148-49 (Wolters Kluwer 8th ed. 2009).}

Furthermore, this explanation should be given before the presentation of evidence. Because jury instructions are typically given after the presentation of evidence and just prior to deliberation, jurors have already had the evidence framed for them, and have already been primed to view it in a particular (or several different) ways.\footnote{See discussion on priming and framing supra Part I.B.} These primes and frames activate schemas that, as noted above, may or may not be legally correct and appropriate. In many cases, they are likely activating schemas in jurors that include misconceptions about the law, and once activated, these schemas will persevere throughout the trial and into deliberations. If courts incorporated a more neutral, pre-trial explanation of the law, this neutral and legally correct information would have a priming and framing effect, creating and activating appropriate schemas and allowing jurors to better weigh the evidence from both sides.

Judges have discretion to determine the timing of jury instructions, and some judges do decide to give jurors instructions before the presentation of evidence so that jurors will have some prior understanding of the law they will later be asked to apply.\footnote{89 C.J.S. Trial § 809. Appellate courts have consistently left decisions about the use and content of pretrial instructions to the discretion of the trial court judge. See, e.g., United States v. Ruppel, 666 F.2d 261, 273-74 (5th Cir. 1982); People v. Valenzuela, 76 Cal. App. 3d 218, 221 (Ct. App. 1977). Some appellate opinions encourage the use of pretrial instruction. See People v. Valenzuela, 76 Cal. App. 3d 218, 222 (Ct. App. 1977) (noting that “we commend the astute judge who tries to give the jury advance notice of the law applicable to the case….[A]s we see it, the purpose of preinstructing jurors is not to avoid the necessity of instructing at the close of argument; rather, it is to give them some advance understanding of the applicable principles of law so that they will not receive the evidence and arguments in a vacuum.). Others advise against it. See, e.g., People v. Murillo, 55 Cal. Rptr.2d 21,24 (Ct. App. 1996) (noting that “[t]he preferable, even if not yet the most common, method is to instruct the jury after the close of evidence, but before the summations of counsel,” while acknowledging that the trial court has discretion on this matter).} Research on schema theory supports this approach; people are more likely to remember information relevant to schemas,\footnote{Taylor & Crocker, at 98, supra note ___.} and context affects people’s interpretations of new information, as a result of both priming and framing effects.\footnote{See generally Part I.B.} This suggests that hearing the law before the evidence should give jurors
appropriate schemas for processing the evidence and enhance their ability to identify and remember relevant facts.

One study found that subjects who heard the law both before and after trial were better able to apply the law to the facts of the case than other subjects. Furthermore, preinstruction had no apparent downside: “there were no decrements in their abilities to recall the evidence, understand the law, or make verdict decisions. It appears, then, that these benefits of preinstruction may be realized without cost to jurors’ information processing or decision making.” Moreover, some research suggests that jurors who hear instructions twice—both before and after the presentation of evidence—have better comprehension than jurors who only hear the instructions once. Furthermore, instructions could still be repeated at the close of evidence and jurors could still be given copies of both the written instructions and the pre-trial explanations to take with them into deliberations.

C. Helping Jurors Reduce Schema Perseverance

Jurors should also be explicitly told to consider the evidence from both sides as a means of reducing schema perseverance and bias. Studies have found that while demanding that someone be accurate and fair does not guarantee that a person will follow that instruction, telling people to consider the evidence from both sides might have that effect. For example, one study found that instructions to be “as objective and unbiased as possible” in reviewing studies on capital punishment did not in fact reduce bias. However, when subjects were explicitly told to consider the new evidence from both points of view, bias was reduced. In other words, it seems that when we tell people to think carefully about how they are evaluating evidence and to pay attention to biases—if we ask them to monitor their own cognitive process—we can reduce the impact of schemas on decision-making. Because most jurors are largely unaware

192 The author notes, however, that this result cannot be seen as a pure effect of pretrial instruction because the group that only received pre-instructions (and no post-instructions) did not show this improvement, but the results do indicate that there is benefit in hearing the instructions twice. Vicki L. Smith, Impact of Pretrial Instruction on Jurors’ Information Processing and Decision Making, 76 J. APPLIED PSYCHOL. 220, 226 (1991).
193 Id.
194 Elwork et al., at 177-78.
196 Lord et al., at 1234.
197 FISKE & TAYLOR, at 172-73.
of the impact of schemas on decision-making, telling jurors about schemas and their potential biasing effects before they evaluate any evidence might also help to ameliorate the effect of schemas on juror decision-making.\(^{198}\)

Furthermore, by asking people to be more aware of the ways in which schemas, and specifically priming and framing, influence decision-making, we can, through greater awareness of these typically unconscious phenomenon, recognize their effects and reduce their impact on decision-making. For example, although we cannot avoid viewing problems through frames, “with effort you can become aware of how you are framing a situation and whether there are alternatives.”\(^{199}\) To do this, people need to become aware of the origins of their frames, as well as how others in the same situation might be framing the same issue or problem. Similarly, if decision makers become more aware of their own decision-making process, this could have an impact on their susceptibility to primes.\(^{200}\) Moreover, priming might also be counteracted through instructions that encourage feelings of accountability.\(^{201}\)

We should also ask jurors, before coming a decision, to try to create plausible explanations for both—or all—sides. This could reduce unwarranted theory perseverance by showing jurors how easily either side might be right, or how either theory might be true.\(^{202}\) In a follow-up to the firefighter study discussed above,\(^{203}\) Anderson found that if people are compelled to explain why their theory might be wrong, the perseverance effect was moderated.\(^{204}\) “Inducing people to create causal explanations of opposite social theories produces more flexible and appropriate responses

\(^{198}\) FISKE \& TAYLOR, at 172-73
\(^{199}\) BREST \& KRIEGER, at 36.
\(^{201}\) Stanchi, at 348-49 (citing Jennifer S. Lerner et al., Sober Second Thought: The Effects of Accountability, Anger, and Authoritarianism on Attributions of Responsibility, 24 PERSONALITY \& SOC. PSYCHOL. BULL 563 (1998)). In the cited study, some subjects in an anger priming experiment were told that an “expert” would interview them at the end of the study to assess their responses and reasoning. Those subjects reported they engaged in a more deliberative decision-making process than those who were not accountable for their reasoning. Id. at 571.
\(^{202}\) Anderson, 129. Anderson warns, however, that these procedures might not be as effective when the theory involved has a strong emotional component, such as a person’s beliefs concerning the deterrent effect of capital punishment, because that emotional component might prevent people from considering competing theories, even when explicitly instructed to do so. Id. at 136.
\(^{203}\) See supra note ____ and accompanying text.
\(^{204}\) Anderson, 134.
to challenges to those theories.\textsuperscript{205} Subjects who explained both a positive and a negative relationship between firefighting ability and risk preference were significantly less reluctant to abandon their initial theory when told that their case history was fictitious.\textsuperscript{206} Asking jurors to describe “potential alternative hypotheses before the presentation of evidence may minimize the influence of specific beliefs on the part of the individual asked to weigh the evidence.”\textsuperscript{207} In other words, if jurors are asked to articulate theories for both sides before reaching a final decision, theory perseverance and thoughtless schema application could be minimized.

**CONCLUSION**

Schemas are powerful, though largely unconscious, frameworks that influence the way people see, interpret, and remember information. Like any other person interpreting a set of facts, jurors cannot help but be influenced by schemas when interpreting facts and applying the law during a trial. Furthermore, although the law has made great strides in improving juror comprehension of jury instructions, even “plain-language” instructions are vulnerable to the interpretive influence of schemas. Jurors’ understanding of the law is typically undeveloped, and therefore their schemas for legal concepts is often correspondingly incorrect or undeveloped. Moreover, although they may not be correct in their assumptions about the law, jurors do not come to trials as blank slates; they bring with them existing schemas that shape the way they view both the law and the facts, often garnered from the media and entertainment.

For this reason, existing jury instructions, which are typically given to jurors after the presentation of evidence, do little to counteract or correct jurors’ undeveloped or misinformed schemas. Based on findings from the social sciences, lawyers and judges should attempt to develop jurors’ schemas to make them more like experts’ schemas, which are better organized and more accessible, allowing for more thoughtful judgment and better decision-making. To accomplish this, jurors should be provided with both well-written jury instructions and pre-trial explanations of the applicable law, including examples of how the law applies. We should also help jurors to overcome schema perseverance by asking them to consider the evidence from both sides and to attempt to create plausible explanations for both sides of a case. These steps will help counteract inappropriate preexisting schemas, activate legally appropriate schemas,

\textsuperscript{205} Anderson 134.
\textsuperscript{206} Anderson 134.
\textsuperscript{207} Fugelsang & Dunbar, at 163.
and result in better informed decision-making by jurors.