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ESSAY

FALSE CONSENSUS BIAS IN CONTRACT INTERPRETATION

*Lawrence Solan**
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Psychologists call the propensity to believe that one's views are the predominant views, when in fact they are not, "false consensus bias." In the interpretation of contracts, false consensus bias should be of special concern when a dispute arises over whether an event fits within contractual language. In this Essay, we report experimental studies conducted with laypeople and judges. Lay individuals, when presented with scenarios relevant to insurance contracts that have led to inconsistent results among courts, do not understand contractual language uniformly. Because they are subject to false consensus bias, these individuals believe that their interpretation is the normal interpretation, even when it is not. This holds true whatever the scenario, whatever the interpretation, and whichever party will be assisted by one interpretation or the other. Judges presented with the same scenarios also exhibited false consensus bias. These studies suggest that judges should take seriously the disagreement of other judges in determining whether contractual language is subject to multiple interpretations. Otherwise, litigants may become unwilling participants in a lottery whose result is determined by the idiosyncratic interpretation of the judge assigned to their case. Concern about the reasonable expectations of the parties should also be taken into account.

INTRODUCTION

Psychologists call the propensity to believe that one's views are the predominant views, when in fact they are not, "false consensus bias."¹ In this Essay, we report experimental studies that present a problem for the

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1. See Joachim Krueger & Russell W. Clement, The Truly False Consensus Effect: An Ineradicable and Egocentric Bias in Social Perception, 67 *J. Personality & Soc. Psychol.* 596, 596-97 (1994) (explaining generally effect of personal attributes and endorsements on consensus estimates); see also *infra* notes 67-73 and accompanying text.

law of contracts: When individuals are given scenarios that have led to differences of opinion among the courts, they do not understand contractual language uniformly and, because they are subject to false consensus bias, believe that their interpretation is the normal interpretation, even when it is not. This is true whatever the scenario, whatever the interpretation, and whichever party will be assisted by one interpretation or the other. When judges are presented with the same scenarios, they also exhibit false consensus bias.

These results suggest that the parties to a contract may understand their rights and obligations differently and never notice the differences until a disagreement occurs and litigation ensues. At that point, if the decisionmaker—typically a judge—does not recognize the legitimacy of both contrary interpretations because of false consensus bias, then she may fail to engage in additional investigation into the parties' intent or to apply interpretive principles of contract law that follow from a finding of ambiguity. The parol evidence rule, for example, permits the admission of extrinsic evidence to resolve ambiguity in contractual language, but prohibits evidence offered to vary the terms of a contract whose language is clear.² Courts vary considerably as to how much investigation to conduct before determining whether contractual language is clear as an initial matter,³ but the general principle—that unambiguous contract terms may not be refuted by the introduction of extrinsic evidence—is fairly uniform across jurisdictions, as recognized by the Restatement,⁴ the UCC,⁵ and the courts.⁶

2. See, e.g., E. Allen Farnsworth, *Contracts* § 7.3, at 426 (4th ed. 2004) (“[S]ince the [parol evidence] rule excludes evidence only if it contradicts the writing . . . [,] the rule does not exclude evidence offered to help interpret the language of the writing.”).

3. The division is between courts that use a “hard” parol evidence rule that permits courts to limit their investigation to the language of the contract itself, and those that use a “soft” parol evidence rule that permits some preliminary inquiry into whether a contract that looks clear at first glance remains so after some investigation. See generally Eric A. Posner, *The Parol Evidence Rule, the Plain Meaning Rule, and the Principles of Contractual Interpretation*, 146 U. Pa. L. Rev. 533 (1998) (describing and analyzing “hard” and “soft” parol evidence rule approaches).

4. Restatement (Second) of Contracts § 213(1) (1981) (“A binding integrated agreement discharges prior agreements to the extent that it is inconsistent with them.”).

5. U.C.C. § 2-202 (2004) (stating that writings intended as final expressions “may not be contradicted by evidence of any prior agreement or of a contemporaneous oral agreement”).

6. Courts continue to articulate the parol evidence rule in such terms. For recent examples, see, e.g., *Clanton v. Inter.Net Global, L.L.C.*, 435 F.3d 1319, 1326 (11th Cir. 2006) (“Under New York law, ‘the parol evidence rule requires the exclusion of evidence of conversations, negotiations and agreements made prior to or contemporaneous with the execution of a written contract which may tend to vary or contradict its terms.’” (footnote omitted) (quoting *U.S. Fire Ins. Co. v. Gen. Reinsurance Corp.*, 949 F.2d 569, 571 (2d Cir. 1991))); *Staubach Retail Servs.-Se., LLC v. H.G. Hill Realty Co.*, 160 S.W.3d 521, 525 (Tenn. 2005) (“The parol evidence rule does not permit contracting parties to ‘use extraneous evidence to alter, vary, or qualify the plain meaning of an unambiguous written

Moreover, holding that there is no contract when the parties do not share an understanding of a contractual term is not a satisfactory approach to resolving all contractual disputes, because it will always advantage the party upon whom the contract imposes an obligation and disadvantage the party to whom the contract grants a right. Differences in the interpretation of an insurance policy, for example, surely should not routinely lead to the conclusion that there is no insurance. To the contrary, the law aims to reach the opposite result, giving the policyholder the advantage when the terms of an insurance policy are not clear.⁷ Thus, false consensus bias tends to undermine the application of the ordinary principles of contract interpretation.

Part I of this Essay briefly summarizes some of the legal principles that govern the resolution of ambiguity in the language of contracts. Part II discusses psychological and linguistic literature that describes circumstances in which consensus about meaning tends to dissipate. In particular, consensus about membership in a category fades when words are used in an unusual way. For instance, everyone agrees that a table is a piece of furniture, and a good example of furniture at that. In contrast, some might think that a lamp is an example of furniture but not a good example of furniture, and some might not think that a lamp is a piece of furniture at all. Part III discusses the literature on false consensus bias, which reveals that people tend to believe that their understanding of the world is the predominant one and that they are therefore in agreement with most other people. Part IV describes two experiments that use scenarios from insurance contracts to illustrate both the lack of consensus and the presence of false consensus bias in the interpretation of contractual language among laypeople and judges alike. When asked to decide whether a person who suffers injury from sandblasting equipment was injured by "pollution," or whether a percussive force that causes damage to a building constitutes damage from "earth movement," both judges and laypeople exhibited a combination of disagreement and an exaggerated sense of how many people agreed with their responses. The experiments suggest that indeed people are not in consensus about the meanings of contractual terms in nonprototypical situations and that at the same time they suffer from false consensus bias. Part V contains our analysis and recommendations. Among them are the suggestions that judges pay more attention to the nonuniform interpretations of prior courts as evidence of ambiguity and that appellate panels pay close attention to disagreement among their members. We further suggest that courts apply the doctrine of reasonable expectations and the Restatement's rule

contract.'" (citation omitted) (quoting *GRW Enters., Inc. v. Davis*, 797 S.W.2d 606, 610 (Tenn. Ct. App. 1990)).

7. The principle is called *contra proferentem*. For recent discussion of the rule and why it has not been effective at eliminating ambiguous language from insurance contracts, see Michelle E. Boardman, *Contra Proferentem: The Allure of Ambiguous Boilerplate*, 104 Mich. L. Rev. 1105, 1121–25 (2006).

that courts must interpret a term against a party who knows of another's different interpretation at the time of contract formation.⁸ The application of these doctrines will serve to inhibit insurers from strategically using their superior knowledge acquired as repeat players to take advantage of judges' false consensus bias. Part VI is a brief conclusion.

I. THE LAW GOVERNING CONTRACTUAL AMBIGUITY

The overriding goal in the interpretation of contracts is to effectuate the intent of the parties.⁹ Courts repeat this goal almost as a mantra.¹⁰ The United States Court of Appeals for the Sixth Circuit put it succinctly in a recent case: "According to Michigan law, '[t]he cardinal rule in the interpretation of contracts is to ascertain the intention of the parties. To this rule all others are subordinate.'"¹¹ To this end, courts rely most on the language of the contract to determine what the parties intended, especially when the language appears unequivocal.¹² Thus, the law governing contract interpretation places a great deal of weight on plain meaning. When the words of a contract are susceptible to only one reasonable interpretation, courts are likely to do more good than harm, at least over a wide sampling of cases, if they assume that the parties understood their agreement as people would ordinarily understand the contractual language.¹³

Problems arise when the parties disagree about the meaning of a contract and more than one reasonable interpretation is available. Ambiguous language, as it is understood in contract law, is language that is

8. Restatement (Second) of Contracts § 201(2).

9. See *id.* § 201(1) ("Where the parties have attached the same meaning to a promise or agreement or a term thereof, it is interpreted in accordance with that meaning.")

10. See, e.g., *Perry v. Wolaver*, 506 F.3d 48, 53 (1st Cir. 2007) ("Contracts should be interpreted to give effect to the parties' intentions expressed by the writing, considering the subject matter, purpose, and object of the contract."); *French v. Assurance Co. of Am.*, 448 F.3d 693, 700 (4th Cir. 2006) ("The principal rule in the interpretation of contracts is to effect the intentions of the parties." (quoting *Nationwide Ins. Co. v. Rhodes*, 732 A.2d 388, 390–91 (Md. Ct. Spec. App. 1999))); *Canal Ins. Co. v. Underwriters at Lloyd's London*, 435 F.3d 431, 435 (3d Cir. 2006) ("The goal of interpreting an insurance policy, like the goal of interpreting any other contract, is to determine the intent of the parties as manifested by the language of the policy.")

11. *Sault Ste. Marie Tribe of Chippewa Indians v. Granholm*, 475 F.3d 805, 811 (6th Cir. 2007) (quoting *McIntosh v. Grooms*, 198 N.W. 954, 955 (Mich. 1924)).

12. See, e.g., *Wash. Metro. Area Transit Auth. v. Potomac Inv. Props., Inc.*, 476 F.3d 231, 235 (4th Cir. 2007) (holding that summary judgment is appropriate when "contract in question is unambiguous or when an ambiguity can be definitively resolved by reference to extrinsic evidence.")

13. Typical is one court's statement in *In re Linerboard Antitrust Litigation*, 443 F. Supp. 2d 703, 713 (E.D. Pa. 2006) ("[T]he primary goal of contract interpretation is to determine and enforce the intent of the parties. To do so, the Court must turn to the language of the contract 'When the parties express their intent in unambiguous words, those words are to be given their plain and ordinary meaning.'" (citations omitted) (quoting *Motorsports Racing Plus, Inc. v. Arctic Cat Sales, Inc.*, 666 N.W.2d 320, 323 (Minn. 2003))).

“susceptible to more than one reasonable interpretation.”¹⁴ This determination is made by the judge. Often, courts resort to the “ordinary meaning” rule as a surrogate for what the parties likely had in mind.¹⁵ As the Second Circuit explained the rule: “In determining whether the language in a contract is ambiguous, the words must be given their ‘natural and ordinary meaning,’ and the fact that the parties interpret a provision differently does not mean the language is *per se* ambiguous.”¹⁶

Thus, in an effort to ascertain the intent of the parties, it is up to judges to determine not only whether language is plain or ambiguous, but whether a particular use of a word falls within its ordinary meaning. When the language is plain, judges typically enforce the contractual provision as written and thus as most likely intended by the majority of people and, presumably, by the parties. When there is some doubt, further inquiry into the parties’ intent is permitted, although the ordinary meaning is often used as a reasonable surrogate for such intent. If the parties genuinely have different but reasonable understandings, a court may hold that they never reached agreement and that, therefore, no contract was formed. That is what happened in the famous nineteenth century case, *Raffles v. Wichelhaus*,¹⁷ typically known as “the *Peerless* case.” The case involved the purchase of cotton during the American Civil War, a time when prices were fluctuating.¹⁸ The contract called for the cotton to be shipped in 1863 from Bombay to Liverpool on the *Peerless*. It turned out, however, that there were two ships with that name sailing from India to England that year, one in October, the other in

14. *Mincin v. Vail Holdings, Inc.*, 308 F.3d 1105, 1112 (10th Cir. 2002) (applying Colorado law); see also *Dasey v. Anderson*, 304 F.3d 148, 158 (1st Cir. 2002) (applying Massachusetts law); *Golden Pac. Bancorp v. F.D.I.C.*, 273 F.3d 509, 516 (2d Cir. 2001) (applying New York law); *Martin v. Monumental Life Ins. Co.*, 240 F.3d 223, 233 (3d Cir. 2001) (applying Pennsylvania law).

15. See *Spalding & Son, Inc. v. United States*, 24 Cl. Ct. 112, 139–41 (Cl. Ct. 1991) (interpreting “loss” in lumber contract to include destruction of trees due to forest fire, and stating “simple and straightforward” rule of contract construction that “[w]ords are to be given their plain and ordinary meanings” (internal quotation marks omitted)); see also *Pac. Ins. Co. v. Am. Nat’l Fire Ins. Co.*, 148 F.3d 396, 405 (4th Cir. 1998) (interpreting liability coverage in fire insurance plan under strict adherence to plain meaning rule of contract interpretation); *Int’l Multifoods Corp. v. Commercial Union Ins. Co.*, 98 F. Supp. 2d 498, 503 (S.D.N.Y. 2000) (using “plain meaning rule” to interpret Wartime Exclusion in insurance contract to not apply to stolen goods during peacetime); *Meritxell, Ltd. v. Saliva Diagnostic Sys., Inc.*, No. 96 Civ. 2759, 1998 WL 40148, at *7 (S.D.N.Y. Feb. 2, 1998) (collecting cases explaining plain meaning rule).

16. *Omega Eng’g, Inc. v. Omega, S.A.*, 432 F.3d 437, 446 (2d Cir. 2005) (quoting *United Illuminating Co. v. Wisvest-Conn., LLC*, 791 A.2d 546, 550 (2002)).

17. (1864) 159 Eng. Rep. 375 (Exch.). For recent discussion of this case in a judicial opinion, see, e.g., *Rossetto v. Pabst Brewing Co.*, 217 F.3d 539, 543 (7th Cir. 2000) (describing existence of two ships as objective evidence of latent ambiguity in contract).

18. For discussion of the circumstances surrounding the case and the reason for some of the contractual language, see generally A.W. Brian Simpson, *Contracts for Cotton to Arrive: The Case of the Two Ships Peerless*, in *Contracts Stories* 29 (Douglas G. Baird ed., 2007).

December.¹⁹ During the months between the arrival of the first and second ships *Peerless*, the price of cotton fell,²⁰ and the buyer refused to accept delivery when the cotton finally arrived on the second *Peerless*. The court entered judgment for the buyer, accepting his theory that no contract was formed because the parties did not have the same transaction in mind when they made the deal.²¹ The principle of the case is still good law, as reflected in section 201(3) of the Restatement, which states, “Except as stated in this Section, neither party is bound by the meaning attached by the other, even though the result may be a failure of mutual assent.”²²

The result of the *Peerless* case makes the most sense when it is relatively clear that the parties’ differing interpretations were both genuine and reasonable. It is not easy, however, to determine when this is so. Surely, the disagreement itself cannot form the basis of such a finding. Otherwise, parties, coached by their lawyers, would have only to say that they disagree with the opposing party’s interpretation of the contractual language at issue to gain a litigation advantage. For this reason, courts frequently pronounce that “[a] contract is not rendered ambiguous simply because the parties do not agree on the meaning of its terms.”²³

But if disagreement between the parties is not an adequate basis for holding a contract ambiguous, what is? Judges, in determining whether contractual language is susceptible to more than one reasonable interpretation, typically rely on their own intuitions as native English speakers. The problem, however, is that a judge has no way of determining whether she is correct in her assessment that her own interpretation is widely shared. The judge’s assumption—quite reasonable in most situations—is that people who speak the same language possess minds that are configured similarly, such that their interpretations of words in that language would not vary widely. As Noam Chomsky puts it:

19. *Raffles*, 159 Eng. Rep. at 375.

20. See Simpson, *supra* note 18, at 51.

21. *Raffles*, 159 Eng. Rep. at 376.

22. Restatement (Second) of Contracts § 201(3) (1981). Earlier subsections deal with situations in which the parties were not in accord at the time the contract was formed, and one party was aware or had reason to be aware of the other’s divergent understanding. In such cases, the unknowing party’s meaning prevails. *Id.* § 201(2).

23. *Bourke v. Dun & Bradstreet Corp.*, 159 F.3d 1032, 1036 (7th Cir. 1998) (quoting *Flora Bank & Trust v. Czyzewski*, 583 N.E.2d 720, 725 (Ill. App. Ct. 1991)); see also *Evergreen Invs., LLC v. FCL Graphics, Inc.*, 334 F.3d 750, 755 (8th Cir. 2003) (concluding letter agreement for purchase of property was not ambiguous, and parol evidence rule was not applicable when clear on face of letter that both parties agreed to transaction); *Hunt Ltd. v. Lifschultz Fast Freight, Inc.*, 889 F.2d 1274, 1278–79 (2d Cir. 1989) (holding contract for fee payments in freight transport agreement is not ambiguous merely because parties later disagree); *REP MCR Realty, LLC v. Lynch*, 363 F. Supp. 2d 984, 1019–20 (N.D. Ill. 2005) (holding that use of term “voluntary” in loan agreement was not ambiguous merely because guarantor and third party defendant attorney who advised him disagreed on its meaning).

It may be that when he listens to Mary speak, Peter proceeds by assuming that she is identical to him, modulo *M*, some array of modifications that he must work out. Sometimes the task is easy, sometimes hard, sometimes hopeless. To work out *M*, Peter will use any artifice available to him, though much of the process is doubtless automatic and unreflective.²⁴

Whether we speak of Peter and Mary, of the parties to a litigation, or of the judge deciding on the clarity of contractual language, we can only assume that we are more or less normal in our understanding of language and make adjustments for differences that come to our attention. Willard Van Orman Quine recognized this problem when he famously conjectured about a linguist doing field work on an unfamiliar language. The linguist's informant, seeing a rabbit run across a field, says, "gavagai." From this, the linguist infers that "gavagai" means "rabbit" in the unfamiliar language. However, as Quine rightly points out, "gavagai" can just as easily refer to the parts of a rabbit or to a stage of rabbithood. The linguist really does not know:

When from the sameness of stimulus meanings of 'Gavagai' and 'Rabbit' the linguist leaps to the conclusion that a gavagai is a whole enduring rabbit, he is just taking for granted that the native is enough like us to have a brief general term for rabbits and no brief general term for rabbit stages or parts.²⁵

The assumption that others understand words the way we do, then, may not always be a valid one. In the next Part, we look at a situation in which this assumption is predictably unsafe.

II. THE DISSIPATION OF CONSENSUS IN NONPROTOTYPICAL SITUATIONS

Although the studies reported in this Essay examine ambiguity that is difficult to recognize, most forms of ambiguity are easily identifiable. Even if we do not notice alternative readings when first exposed to ambiguous language, we have little trouble recognizing the various permissible interpretations once the ambiguity is brought to our attention. Consider Chomsky's famous example of syntactic ambiguity, "Flying planes can be dangerous,"²⁶ or its variant, "Visiting relatives can be annoying." The structure of these sentences permits us to assign two distinct interpretations, and we have little trouble recognizing them. Similarly, ambiguity

24. Noam Chomsky, *New Horizons in the Study of Language and Mind* 30 (2000).

25. Willard Van Orman Quine, *Word and Object* 51–52 (1960). This is not to say that Quine's example is of practical significance. Children learning words proceed with biases that prefer whole objects rather than an amalgam of parts of an object. And even if Quine is correct, there are no rabbits that are not both whole rabbits and also a set of undetached rabbit parts, making errors in interpretation rather small. For further discussion of Quine's example, see Gregory L. Murphy, *The Big Book of Concepts* 340–46 (2002).

26. Noam Chomsky, *Aspects of the Theory of Syntax* 21 (1965).

of reference, as illustrated by the *Peerless* case, is easy enough to detect once the facts come to light.²⁷

As the *Peerless* case also illustrates, however, when differences in understanding remain opaque for too long, they may lead to litigation. In earlier work, Lawrence Solan has referred to undetected indeterminacy in meaning as “pernicious ambiguity.”²⁸ How pernicious the ambiguity is depends on how difficult it is to detect it. Ambiguity of reference—the problem in the *Peerless* case—is relatively transparent. If there are two people named Bill in the room, it is easy enough to imagine a misunderstanding in which a speaker says something about one of the Bills, but a hearer understands the comment as being about the other. Such problems are likely to be easily discovered and resolved once they come to light. Similarly, the parties might have disagreed about which ship *Peerless* was to bring the cotton from India to England, but once the ambiguity was brought to their attention, they could not have disagreed about the fact that both ships had the same name and that confusion could ensue as a result.

In contrast, there are linguistic contexts in which people may simply disagree about the range of possible meanings altogether. This often occurs when a speaker uses a word intending to express a nonprototypical instance of a category, and the hearer does not understand the word as a member of that category at all. Psychologists generally believe that prototypes play a role in our conceptualization of the world, although there is disagreement about how to characterize that role. In everyday life, not only do we decide whether something is a member of a category, but we also recognize how well that thing fits into the category. The pioneering work of psychologist Eleanor Rosch in the 1970s established that people judge robins to be better examples of birds than ostriches, even though we recognize that both are birds. Tables are good examples of furniture; lamps are marginal examples at best. And so on.²⁹

The psychological reality of prototypes has led some to claim that we conceptualize based on similarity, matching new experiences to prototypical exemplars of conceptual categories we already have and judging whether they fit well enough to be considered members of those catego-

27. For discussion of the language issues in this case, see Sanford Schane, *Language and the Law* 20–22, 33–35, 50–51 (2006).

28. Lawrence M. Solan, *Pernicious Ambiguity in Contracts and Statutes*, 79 *Chi.-Kent L. Rev.* 859, 859 (2004). As acknowledged in that article, the expression “pernicious ambiguity” comes from John Darley. See *id.* at 859 n.1.

29. Eleanor Rosch, *Cognitive Representations of Semantic Categories*, 104 *J. Experimental Psychol.: General* 192, 197–99, 229 tbl.A1 (1975). For an overview of the role of prototypes and categories, see generally James A. Hampton, *Psychological Representation of Concepts*, in *Cognitive Models of Memory* 81 (Martin A. Conway ed., 1997).

ries.³⁰ Others have argued—convincingly, we believe—that while it is true that categories *have* prototypes, it is not true that categories *are* prototypes.³¹ Thus, even though people judge some species of birds to be better examples of the category than others, when asked, people do not believe that *birds* is a graded category or, for that matter, that an ostrich is any less of a bird than a more typical example.³² Moreover, complex concepts do not share the prototypes of their individual elements. As Daniel Osherson and Edward Smith demonstrated, a “striped apple” may have prototypical stripes and may be an otherwise prototypical apple, but does not as a unit inherit the prototypicality of its constituent parts.³³ Similarly, there is no satisfactory way to derive our understanding of pet fish from the prototypes of the constituent concepts.

The issue of how our concepts are constituted remains a subject of research among psychologists.³⁴ Many now believe that concepts contain both definitional features that are necessary and/or sufficient for category membership and information about the concept's prototype, although, as noted, there is great debate as to the status of the latter in conceptualization.³⁵

Significantly for our purposes, uncertainty in categorization goes well beyond the recognition that some things are better examples than others. As we stray from the prototype, we not only recognize situations as nonprototypical, but we begin to disagree over whether the situation is

30. See Hampton, *supra* note 29, at 94–98 (providing overview of exemplar approach to concept representation); see also Jesse J. Prinz, *Furnishing the Mind: Concepts and Their Perceptual Basis* 139–64 (2002) (summarizing prototype theory).

31. See, e.g., Andrew C. Connolly et al., *Why Stereotypes Don't Even Make Good Defaults*, 103 *Cognition* 1, 2 (2007) (suggesting that categories have prototypes but are not themselves prototypes).

32. See Sharon Lee Armstrong, Lila R. Gleitman & Henry Gleitman, *What Some Concepts Might Not Be*, 13 *Cognition* 263, 267 (1983) (describing view of categories that considers “[m]embership in the class [as] categorical, for all who partake of the right properties are in virtue of that equally birds; and all who do not, are not”).

33. Daniel Osherson & Edward E. Smith, *On the Adequacy of Prototype Theory as a Theory of Concepts*, 9 *Cognition* 35, 44 (1981), reprinted in *Concepts: Core Readings* 261, 268 (Eric Margolis & Stephen Laurence eds., 1999); see also Jerry A. Fodor, *Concepts: A Potboiler*, 50 *Cognition* 95, 108–09 (1994) (describing how object may not assume prototypicality of constituent parts).

34. See generally Murphy, *supra* note 25, for an excellent presentation of many of the ideas and analyses.

35. See, e.g., Philip N. Johnson-Laird, *The Mental Representation of the Meaning of Words*, 25 *Cognition* 189, 206 (1987) (suggesting that our understanding of meaning contains both truth values and default values); Steven A. Sloman, *The Empirical Case for Two Systems of Reasoning*, 119 *Psychol. Bull.* 3, 8–10 (1996) (arguing that mind relies on both rule-based and associative systems of categorization); Edward E. Smith, Andrea L. Patalano & John Jonides, *Alternative Strategies of Categorization*, 65 *Cognition* 167, 192 (1998) (promoting existence of two distinct procedures for categorization: one rule-based, and one based on exemplar similarity); Edward E. Smith & Steven A. Sloman, *Similarity-Versus Rule-Based Categorization*, 22 *Memory & Cognition* 377, 385 (1994) (arguing that categorization is done in two ways: by similarity and by rule).

a member of the category at all. As the philosopher Tim Schroeder has put it:

[I]t is a fact of life that, while most people agree about paradigmatic cases when judging kind membership, most people can find something to disagree over regarding some non-paradigmatic cases. Are fruits a scientific kind, so that tomatoes and squashes count as fruits? Or are they not, making tomatoes and squashes into vegetables? Is a latte made from soymilk really a latte, or a coffee and soy beverage? Are some sport/utility vehicles really light trucks, or are these classes unified only for legal purposes?³⁶

In a set of very interesting studies, the British psychologist James Hampton and his colleagues demonstrated the dissipation of consensus in nonprototypical instances.³⁷ Expanding on a paradigm used by Lance Rips,³⁸ they presented subjects with stories like the following:

There was a small animal with wings and feathers, and it lived on the nectar of flowers. The animal looked and acted just like a hummingbird. But then, [*], the animal began to change. Eventually it ended up with transparent wings and a black and yellow striped body, always buzzing about. It looked and acted just like a bee. Then when it mated, the offspring looked and acted just like hummingbirds.³⁹

Thus, in the initial stage, the animal looked and acted like a hummingbird, and in the changed stage, the animal looked and acted like a bee. The reason for the change, however, was varied systematically. Half the subjects received a version in which the phrase “as a result of toxic contamination of its environment” appeared in place of the element “[*],” while the other half received a version in which the phrase “as a result of natural developmental processes” appeared instead.⁴⁰ Versions containing similar stories about other animal metamorphoses were also presented, and subjects were asked various questions about categorization.⁴¹

Subjects did not respond uniformly. In this study, 38% of the subjects categorized the animal in accordance with its appearance, regardless of the reason for the change. Others (28%) believed: Once a hummingbird, always a hummingbird. Still others (16%) believed that the animal

36. Tim Schroeder, A Recipe for Concept Similarity, 22 *Mind & Language* 68, 69 (2007).

37. James A. Hampton, Zachary Estes & Sabrina Simmons, *Metamorphosis: Essence, Appearance, and Behavior in the Categorization of Natural Kinds*, 35 *Memory & Cognition* 1785, 1787–98 (2007).

38. Lance J. Rips, *Similarity, Typicality, and Categorization*, in *Similarity and Analogical Reasoning* 21, 38–43 (Stella Vosniadou & Andrew Ortony eds., 1989) (describing experiments in which subjects classified animals that had undergone change in outward appearance).

39. Hampton et al., *supra* note 37, app. at 1800.

40. *Id.*

41. *Id.* at 1788, app. at 1800.

kept its hummingbird essence in the presence of toxins, but natural maturation into a bee-like animal made the animal a bee from beginning to end. Still others gave inconsistent results.⁴² When presented with categorization decisions in unusual circumstances, people may rely on such things as outward appearances, an initial essence, or a folk-theory of maturation to make a decision. Significantly, not all people appear to rely on the same criteria.

Linguists Linda Coleman and Paul Kay present a legally relevant illustration of this phenomenon: the concept of lying.⁴³ According to Coleman and Kay, actual falsity is only one of three elements of lying. The others, intent to deceive and knowledge of falsity, also play substantial roles in our determination of whether a statement constitutes a lie.⁴⁴ To test the hypothesis, they systematically varied these three factors to create eight stories.⁴⁵ They hypothesized that when a story has some but not all of the three factors that make up the prototypical lie, people will judge the stories to contain lies nonetheless, but recognize them as atypical examples.⁴⁶ Their goal was to demonstrate that lying is not an all-or-nothing category, but rather a graded one.

For example, subjects agreed that the following story contained a lie: "Moe has eaten the cake Juliet was intending to serve company. Juliet asks Moe, 'Did you eat the cake?' Moe says, 'No.' Did Moe lie?"⁴⁷ Subjects were asked to respond on a 1 to 7 scale, where a 1 indicated that the participant was sure that Moe did not lie, a 7 indicated that the participant was sure that Moe did lie, and a 4 was the midpoint, indicating that the participant was not sure.⁴⁸ In the case of this story, participants averaged 6.96.⁴⁹ That is, everyone said that Moe lied, and everyone was sure that his response constituted a lie.

Now consider a story in which the individual intended to deceive, but turned out to be telling the truth after all:

Superfan has got tickets for the championship game and is very proud of them. He shows them to his boss, who says, 'Listen, Superfan, any day you don't come to work, you better have a better excuse than that.' Superfan says, 'I will.' On the day of the game Superfan calls in and says, 'I can't come to work today, Boss, because I'm sick.' Ironically, Superfan doesn't get to go to the game because the slight stomach ache he felt on arising

42. Id. at 1789-90 & tbl.1.

43. Linda Coleman & Paul Kay, *Prototype Semantics: The English Word Lie*, 57 *Language* 26 (1981).

44. Id. at 28.

45. Id. at 30.

46. Id. at 32-33.

47. Id. at 31.

48. Id. at 30 & fig.1.

49. Id. at 33 tbl.2.

turns out to be ptomaine poisoning. So Superfan was really sick when he said he was. Did Superfan lie?⁵⁰

When asked whether Superfan had lied, the mean response was 4.61, a lie, but not too far from the midpoint of 4.⁵¹ And consider a story in which the speaker intended to deceive, but told the literal truth, in a Clintonesque manner:⁵²

John and Mary have recently started going together. Valentino is Mary's ex-boyfriend. One evening John asks Mary, 'Have you seen Valentino this week?' Mary answers, 'Valentino's been sick with mononucleosis for the past two weeks.' Valentino has in fact been sick with mononucleosis for the past two weeks, but it is also the case that Mary had a date with Valentino the night before. Did Mary lie?⁵³

Here, the mean was 3.48, again near the midpoint, this time just on the truthful side.⁵⁴

But mean scores do not tell the whole story. Although the means were near the midpoint, it was not the case that just about everyone judged the case as uncertain. While all sixty-seven participants considered Moe to be a liar (scoring his statement as a 5, 6, or 7), there was no consensus about Superfan: 57% said he lied, 31% said he did not lie, and 12% could not decide.⁵⁵ Similarly, while 63% of participants did not believe that Mary lied to John about Valentino, it was still the case that 27% thought she did lie, and 10% could not decide.⁵⁶

What this means is that when people look at nonprototypical situations that have only some of the elements of what is typically called a lie, their judgments are not only less certain, but they are not in agreement. Some elements of a concept, an actual falsehood in the case of lying, may be necessary conditions for some people but not for others. It is only in nonparadigmatic cases that this variation arises because in the most typical uses of the term, all of the elements are present, thus producing consensus about category membership.

This absence of consensus in nonprototypical cases can have serious legal ramifications, say, in a perjury prosecution. Jurors would not only have to find the facts and apply the law, but would also have to reach decisions based on conceptual judgments about which they may not be in agreement.

50. *Id.* at 31–32.

51. *Id.* at 33 tbl.2.

52. Lawrence Solan and Peter Tiersma discuss such examples in the context of the Clinton impeachment. See Lawrence M. Solan & Peter M. Tiersma, *Speaking of Crime: The Language of Criminal Justice* 231–33 (2005) (arguing that different conceptions of lying may explain why people sincerely disagreed over whether Clinton lied about his sexual relations).

53. Coleman & Kay, *supra* note 43, at 31.

54. *Id.* at 33 tbl.2.

55. See *id.* at 39 tbl.5.

56. See *id.*

III. FALSE CONSENSUS BIAS

A. *Overreporting Consensus*

False consensus bias is the phenomenon by which people often believe that their beliefs are more universally accepted than they actually are. Pauline Kael of *The New Yorker* inadvertently exhibited the phenomenon observed in modern cognitive bias research when she wondered how Richard Nixon could have won the 1972 election since “[n]o one I know voted for Nixon.”⁵⁷ Studies of false consensus bias in the last two decades have attempted, through experimentation, to capture the rate at which people overestimate their conformity with societal norms in various contexts.

Early studies in the 1930s showed that those who disregarded rules believed that others did so as well. In a study published by Daniel Katz and Floyd Henry Allport in 1931, students who reported that they had cheated on tests were more likely to believe that others also cheated, and the more of their own cheating they acknowledged, the more cheating they ascribed to other students.⁵⁸ For example, 69.9% of the students admitted having cheated at least once.⁵⁹ Yet while only 8% of those claiming never to have cheated believed that four-fifths or all of the student body cheated, the four-fifths or greater estimates were accepted by 47.7% of those who admitted cheating freely.⁶⁰

Katz and Allport thus found that those students who acknowledged cheating extensively were more likely to believe that others cheated as well. However, the paradigm they used suffers from a design problem that the authors candidly acknowledged: It depends on participants accurately reporting their behavior.⁶¹ If some cheaters falsely report that they are not cheaters, then the study can overestimate the extent to which people falsely attribute their own conduct and views to other people.⁶²

Other studies have avoided this pitfall by asking individuals to answer a wider range of questions and by focusing on more “neutral” subject

57. David Harsanyi, False American Idols, *FrontPage Magazine*, Oct. 21, 2002, at <http://www.frontpagemag.com/Articles/Read.aspx?GJID=FB13CB3C-8C10-4312-99CE-EE8AF05A0BB0> (on file with the *Columbia Law Review*) (recounting Kael’s reaction to Nixon’s landslide presidential victory over George McGovern in 1972 when she supposedly said, “How can that be? No one I know voted for Nixon.”).

58. See Daniel Katz & Floyd Henry Allport, *Students’ Attitudes: A Report of the Syracuse University Reaction Study 227–29* (1931).

59. *Id.* at 210 tbl.LVIII.

60. *Id.* at 227 tbl.LXIV.

61. Katz and Allport aptly recognized this limitation in their study and attempted to minimize the level of misreporting through various measures, such as using anonymous reporting, requiring check rather than handwritten responses, and providing assurances that there would be no disciplinary consequences to participants. See *id.* at 208–09.

62. If, for example, 40% of participants say they cheat and estimate that 75% of others cheat, the result appears to be false consensus bias. But if, because of underreporting, 75% actually cheat, then there is accurate estimation rather than false consensus bias at work.

matter. Lee Ross, David Greene, and Pamela House, for example, asked college students to categorize themselves one way or the other according to thirty-four variables, including personal traits (e.g., shy, optimistic, competitive), personal preferences (e.g., brown or white bread, being alone or with others, Italian or French movies), and other categories of preference and expectation.⁶³ Participants were also asked to estimate the percentage of college students who would categorize themselves one way or the other.⁶⁴ In thirty-two of the thirty-four categories, the participants exhibited bias toward the category in which they had placed themselves.⁶⁵ For instance, participants who preferred brown bread to white bread estimated that 52% of college students in general would share that preference, while those who preferred white bread estimated that only 37.4% of college students would prefer brown bread.⁶⁶

Similarly, in a 1993 study, Joachim Krueger and Russell Clement presented college students with forty statements from a comprehensive personality test, the revised Minnesota Multiphasic Personality Inventory (MMPI-2), and asked them not only to fill out the study, but also to report their beliefs as to how many people would report the same answers to each survey question.⁶⁷ The MMPI-2 survey consisted of self-descriptive phrases, such as, "I sweat very easily even on cold days," and "I am a very sociable person."⁶⁸ Subjects were asked whether they "agreed" or "disagreed" with each description.⁶⁹ The Krueger and Clement study found that in every instance where survey subjects reported that they "agreed" with the MMPI-2 statement, they predicted more consensus than did those who "disagreed" with the statement.⁷⁰

Krueger and Clement also found that even when they informed subjects of the false consensus bias phenomenon, these subjects nonetheless returned responses that reflected the bias as well.⁷¹ That is, they found that education about false consensus bias had no statistically significant depreciative effect on the subjects' estimates of consensus, demonstrating the "robustness" of the consensus bias.⁷² They called this type of false

63. Lee Ross, David Greene & Pamela House, The "False Consensus Effect": An Egocentric Bias in Social Perception and Attribution Processes, 13 J. Experimental Soc. Psychol. 279, 285-88 & tbl.3 (1977).

64. Id. at 286.

65. Id. Ross, Greene, and House reported that "subjects who placed themselves in a given descriptive category *consistently* estimated the percentage of 'college students in general' in that category to be greater than did subjects who placed themselves in the alternative category." Id. (emphasis added).

66. Id. at 287 tbl.3.

67. Krueger & Clement, *supra* note 1, at 598-99.

68. Id. at 600 tbl.1.

69. Id. at 598.

70. Id. at 599.

71. Id. at 598-601.

72. Id. at 599, 601.

consensus bias “truly false consensus” because subjects exhibited it even when warned of the phenomenon.⁷³

While researchers continue to investigate the sources of false consensus bias and the circumstances in which it is most likely to occur,⁷⁴ the fact that the bias exists is well documented. In the next section, we see how the robust nature of false consensus bias combines with the dissipation of consensus about category membership to create difficult interpretive problems for decisionmakers charged with resolving disputes over contractual terms.

B. Indeterminacy, False Consensus Bias, and Contract Interpretation

Susceptibility to false consensus bias places judges engaged in the interpretation of contractual language at risk of erroneous decisionmaking. As discussed earlier, when deciding whether to employ principles of interpretation to resolve contract disputes, judges must decide whether or not the disputed language is ambiguous. In order to do so, the judge must determine whether reasonable people differ as to the meaning of the debated term. If a judge is reasonably certain that a term can only have one meaning, or that the meaning that one party assigns to the term represents the intention of both parties at formation, then the judge is not likely to look outside the language of the contract. As we have seen, however, people differ in their judgments when asked whether a non-prototypical situation fits into a category, and false consensus bias can cause individuals to fail to appreciate that others see the world differently than they do.

Disputes over the language in insurance contracts provide good data for studying the extent of this phenomenon. For one thing, insurance policies contain a great deal of standardized language that has led to litigation and thus make it possible to investigate whether there is language that judges tend to interpret nonuniformly. For another, when litigation over the terms in an insurance contract ensues, the issue is often the legal status of a nonprototypical situation. In this circumstance, false consensus bias may produce legally anomalous results. Not only are insurance policies subject to the parol evidence rule, but they are also subject to the doctrine of *contra proferentum*, which calls for ambiguities in insurance

73. See *id.* at 596–97.

74. See, e.g., Thomas Gilovich, *Differential Construal and the False Consensus Effect*, 59 *J. Personality & Soc. Psychol.* 623, 632–33 (1990) (arguing that false consensus bias is most prevalent when there is opportunity to construe single situation in different ways with no information that others may construe situation differently); James A. Kitts, *Egocentric Bias or Information Management? Selective Disclosure and the Social Roots of Norm Misperception*, 66 *Soc. Psychol. Q.* 222, 234 (2003) (arguing that false consensus bias results from bias in samples of information exchanged rather than from intrinsic cognitive bias).

policies to be construed against the insurer and in favor of coverage.⁷⁵ Thus, the preliminary determination of ambiguity is an important one. The cases yield one of three outcomes: (1) the contractual term unambiguously applies to the facts; (2) the contractual term unambiguously does not apply to the facts; or (3) the parties are legitimately engaged in a dispute over an ambiguous term.

To take an example that will be the subject of our experiments discussed in the next Part, courts disagree about whether fumes that travel within a single building should be considered “pollution” for purposes of interpreting insurance policy clauses that exclude coverage for damage or injury caused by pollution. Courts that recently examined this problem have come to opposite conclusions.⁷⁶ One court, for example, held that the pollution exclusion clause applied “clearly and unambiguously” to “fumes emanating from [an] epoxy/euratane sealant” dispersed within the plaintiff’s place of business.⁷⁷ In contrast, another court refused to apply the exclusion clause where “solvent fumes . . . drifted a short distance from the area of . . . intended use and . . . caused inhalation injuries.” Instead, it found the exclusion clause to be ambiguous and declared that ambiguities “must be construed against the insurer.”⁷⁸

One approach is for courts to consider seriously the absence of consensus among other courts deciding similar cases. But courts are in disagreement over how much attention to pay to their own disagreements. Consider *Park-Ohio Industries v. Home Indemnity Co.*, in which the question was whether fumes from a leaking furnace that permeate a building should be considered “pollution” under a clause excluding pollution injuries in an insurance policy.⁷⁹ The plaintiff raised the absence of uniformity among judges to bolster the argument that the policy was ambiguous, and therefore, should be construed in favor of the insured under the

75. See, e.g., *Wood v. Foremost Ins. Co.*, 477 F.3d 1027, 1028 (8th Cir. 2007) (“When interpreting an insurance policy, Missouri courts follow the principle of *contra proferentem*, and construe any ambiguity against the insurer.”).

76. Compare *Atl. Ave. Assocs. v. Cent. Solutions, Inc.*, 24 P.3d 188, 192 (Kan. Ct. App. 2001) (finding pollution exclusion to be unambiguous and to cover damages caused from leak of cement cleaner), and *Quadrant Corp. v. Am. States Ins. Co.*, 76 P.3d 773, 775–76 (Wash. Ct. App. 2003) (finding pollution exclusion applied to personal injuries of building occupant caused by release of fumes during insured roofing contractor’s application of waterproofing sealant), with *State Farm Fire & Cas. Co. v. M.L.T. Constr. Co.*, 849 So. 2d 762, 770–71 (La. Ct. App. 2003) (finding mold damage not covered by pollution exclusion as exclusion limited to traditional polluters), and *Belt Painting Corp. v. TIG Ins. Co.*, 795 N.E.2d 15, 18–21 (N.Y. 2003) (finding pollution exclusion ambiguous and inapplicable to paint fumes inhaled by contractor).

77. *Firemen’s Ins. Co. of Wash., D.C. v. Kline & Son Cement Repair*, 474 F. Supp. 2d 779, 790 (E.D. Va. 2007).

78. *Tower Ins. Co. of N.Y. v. Breyer*, 830 N.Y.S.2d 122, 123 (App. Div. 2007) (quoting *Belt Painting*, 795 N.E.2d at 20).

79. 975 F.2d 1215, 1216–18 (6th Cir. 1992).

doctrine of *contra proferentem*.⁸⁰ An Ohio court had long ago held that such disagreement constituted evidence of ambiguity:

Where the language of a clause used in an insurance contract is such that courts of numerous jurisdictions have found it necessary to construe it and in such construction have arrived at conflicting conclusions as to the correct meaning, intent, and effect thereof, the question whether such clause is ambiguous ceases to be an open one.⁸¹

But the Sixth Circuit in *Park-Ohio* took the opposite approach, arguing that the court had an obligation to make its own independent judgment of ambiguity. In affirming summary judgment in favor of the insurance company, the court said:

If we were to accept plaintiffs' argument that a contract provision is ambiguous as a matter of law because other jurisdictions have chosen to apply a provision differently, then we would be rejecting a well-settled Ohio rule of construction to apply the plain language of the contract where that language is clear and unambiguous.⁸²

Using a somewhat different argument but reaching the same conclusion, a federal district court in Kansas recognized in *Judd Ranch, Inc. v. Glaser Trucking Service, Inc.* that courts in different jurisdictions used different interpretive principles to construe pollution exclusion clauses.⁸³ The Kansas court nonetheless found such a clause to be clear.⁸⁴ That case involved a claim by Judd Ranch, a cattle ranch company, against Glaser Trucking and Glaser's insurer for delivering cattle feed containing metal fragments. Judd Ranch alleged that Glaser had negligently failed to clean the delivery trucks properly after a previous delivery of scrap metal.⁸⁵ The case was before the court on a summary judgment motion by the insurer, which claimed that the pollution exclusion clause in Glaser's insurance policy exempted it from liability for the damage done to the cattle.⁸⁶ The policy defined pollution as "any solid, liquid, gaseous or thermal irritant or contaminant."⁸⁷ Applying this definition to the scrap metal ingested by the cattle, the court held the language to be unambiguous.⁸⁸

Yet, as the court recognized, other states had reached a contrary result by interpreting pollution exclusion clauses not according to the broad definitions contained in the insurance policies, but rather as

80. *Id.* at 1219–20.

81. *Equitable Life Ins. Co. of Iowa v. Gerwick*, 197 N.E. 923, 925 (Ohio Ct. App. 1934).

82. *Park-Ohio*, 975 F.2d at 1220 (emphasis omitted).

83. No. 06-1245-WEB, 2007 WL 1520905, at *6 (D. Kan. May 22, 2007).

84. *Id.* at *6–*7.

85. *Id.* at *1–*2.

86. *Id.*

87. *Id.* at *2.

88. *Id.* at *5.

“terms of art,” and thus had found them to be ambiguous.⁸⁹ In *American States Insurance Co. v. Koloms*, for example, the Supreme Court of Illinois agreed with other courts that had held definitions of pollution to be so broad as to have “potentially limitless application” and thus limited the exclusion to the “ordinary” sense of pollution—namely, to “only those hazards traditionally associated with environmental pollution.”⁹⁰

The court in *Judd Ranch* rejected this “ordinary meaning” approach,⁹¹ opting instead for the definitional approach that allowed for a broader interpretation of the exclusion. Moreover, it was bound by the decisions of the Kansas Supreme Court, which had earlier relied on broad definitions contained in the policies, in finding the term unambiguous.⁹² Because of its reliance on these earlier cases, the Kansas court never reached the question of whether disagreement among courts in other circumstances might itself provide evidence of ambiguity.

Thus, as evidenced by the foregoing discussion, courts are not uniform in how they perceive disagreement about meaning. The studies reported in the next Part suggest that courts should pay closer attention when they are made aware of the absence of consensus about the meanings of contractual terms.

IV. EXPERIMENTAL EVIDENCE: FALSE CONSENSUS BIAS IN CONTRACT INTERPRETATION

In this Part, we describe two experimental studies designed to test, first, whether people are in agreement about the applicability of contractual terms in a nonprototypical situation, and second, whether false consensus bias gives them an inflated sense of the degree to which their understanding is “ordinary.” Study 1 (described in Part IV.A) examines the responses of laypeople; Study 2 (described in Part IV.B) examines the responses of judges. Both studies reveal disagreement among participants as to whether a term fits into a category contained in the contractual language and an exaggerated sense of the typicality of the participants’ responses.

We chose as the basis of our studies two different terms that appear on standard insurance contracts and that are frequently the subject of litigation: “pollution” and “earth movement.” We have just seen how courts are inconsistent in their treatment of pollution exclusions in insurance contracts. Courts are similarly inconsistent in their treatment of other terms that are the subject of insurance exclusions, including earth movement, the prototype of which is a mudslide.⁹³ One set of scenarios

89. See *id.* at *6 (discussing cases).

90. 687 N.E.2d 72, 79 (Ill. 1997).

91. See *supra* notes 15–16 and accompanying text for discussion of courts’ uses of the “ordinary meaning” approach.

92. *Judd Ranch*, 2007 WL 1520905, at *6–*7.

93. Compare *Wyatt v. Nw. Mut. Ins. Co. of Seattle*, 304 F. Supp. 781, 783–84 (D. Minn. 1969) (finding that earth movement exclusion did not apply to damage caused by third

created for the studies was based on cases that ask whether the onset of silicosis (a respiratory disease caused by inhaling silica dust) as a result of exposure to sand in the course of sandblasting is an injury caused by pollution.⁹⁴ The other was based on cases that address the question of whether damage to property resulting from a concussive force generated from nearby blasting constitutes property damage caused by earth movement.⁹⁵

A. Study 1: Laypeople as Subjects

1. *Experimental Materials and Procedure.* — The study consisted of two different hypothetical scenarios: one involving pollution, the other involving earth movement. In each, a claimant is injured in an event that would entitle him or her to recovery. Each story then proceeds with one of two versions. In one, the policyholder has insurance that might cover the damages that would have to be paid, but the insurance policy contains an exclusion for pollution or earth movement, respectively (we refer to this as the “exclusion version”). In the other version, the policyholder has special coverage that would include injury caused by pollution or earth movement, respectively (we refer to this as the “insurance version”). The use of these two versions controlled for result-oriented responses reflecting a possible bias against either insurance companies or plaintiffs.

We presented each subject with one of the four scenarios. In addition, in a pilot study, we presented subjects with prototypical situations, as “catch trials.” The catch trials were divided into two scenarios, one of which described an accident uncontroversially caused by pollution; the other, an accident clearly not caused by pollution. The purpose of the catch trials was to determine whether participants were paying attention to the materials. The results indicated that participants were, indeed, paying attention to the task. Ninety-two percent answered the questions correctly. The catch trial scenarios are presented in the Appendix. The experimental scenarios are presented below.

POLLUTION SCENARIO

San-o-Sand, Inc. sells sand for use in sandblasters and other sandblasting equipment. A number of workers at San-o-Sand all

party's excavation of contiguous property adjacent to plaintiff's home), with *Loretto-Utica Props. Corp. v. Douglas Co.*, 642 N.Y.S.2d 117, 118 (App. Div. 1996) (holding that earth movement exclusion applied to prevent insured from recovering for damage to building caused by frost heave).

94. Compare *Garamendi v. Golden Eagle Ins. Co.*, 25 Cal. Rptr. 3d 642, 647–48 (Ct. App. 2005) (finding pollution exclusion clause applied to preclude silica dust inhalation claim against insurer), with *Andrew Robinson Int'l, Inc. v. Hartford Fire Ins. Co.*, No. 030353, 2006 WL 1537382, at *10–*11 (Mass. Super. Ct. Feb. 6, 2006) (finding injury from sandblasting caused by neighbor's negligence not within pollution exclusion).

95. See *supra* note 93 and accompanying text for cases interpreting earth movement exclusion clauses.

have recently developed the same very serious infection of the lungs, called silicosis. Silicosis is caused from the inhalation of a bacteria found in contaminated beach sand.^[96] As part of their job, San-o-Sand employees test sandblasters in a special facility. The workers wear masks and other protective equipment during the testing, but particles of sand remain in the air when the testing is done. When the workers remove their protective equipment they inhale large amounts of sand. Samples of this sand have tested positive for the bacteria that causes silicosis.

Exclusion Version: Derek, one of the San-o-Sand workers injured, sued San-o-Sand and won. San-o-Sand, in turn, has now filed a claim with its insurance company, Pacific All-Risk, to repay San-o-Sand for the damages it has to pay to Derek. There is an exception in the Pacific All-Risk policy for injuries caused by pollution. If the bacteria in the sand inhaled by the San-o-Sand workers is found to be a pollutant, Pacific All-Risk will not have to pay on the claim. Pacific All-Risk is claiming that the contaminated sand falls under the pollution exception to the policy.

Insurance Version: Derek, one of the San-o-Sand workers injured, sued San-o-Sand and won. San-o-Sand, in turn, has now filed a claim with its insurance company, Pacific All-Risk, to repay San-o-Sand for the damages it has to pay to its workers, including Derek. San-o-Sand has purchased a protection plan for injuries caused by pollution. If the bacteria in the sand inhaled by the San-o-Sand workers is found to be a pollutant, Pacific All-Risk will have to pay on the claim under the special policy addition.

EARTH MOVEMENT SCENARIO

Jim and Cindy Walsh own a home on a fifteen acre property in the Purple Mountains. The property adjacent to theirs is a ski lodge called Majestic Slopes. Majestic Slopes is expanding and plans to build a new ski lodge. The ground they picked for the new lodge was not level, and Majestic had to blast the rugged area in order to have a flat surface upon which to build the foundation of their new construction. Majestic hired special explosive engineers to set off a small, concentrated amount of dynamite on the grounds, approximately one quarter mile from the Walshes' home. The explosion was more powerful than the engineers expected, however. The blast caused a serious underground concussion. The tremors in the surrounding area shook the foundation and walls of the Walsh house. As a result, it sustained serious structural damage.

Exclusion Version: The Walshes sued Majestic Slopes to recover money to repair their home and won. Majestic Slopes filed a claim with its insurance company, Mountain All-Risk. Majestic's insurance plan contains an exclusion for loss "caused

96. For purposes of the study, we simplified the process by which silicosis develops.

by, resulting from, contributed to or aggravated by any earth movement, including, but not limited to earth sinking, rising, or shifting." If the damage to the Walsh house was caused by earth movement, Mountain All-Risk does not have to pay the claim.

Insurance Version: The Walshes sued Majestic Slopes to recover money to repair their home and won. Majestic Slopes filed a claim with its insurance company, Mountain All-Risk. Majestic purchased a protection plan from Mountain for loss "caused by, resulting from, contributed to or aggravated by any earth movement, including, but not limited to earth sinking, rising, or shifting." If the damage to the Walsh house was caused by earth movement, Mountain All-Risk will have to pay under the special protection plan.

QUESTIONNAIRE

For all four scenarios, subjects were asked the same four questions:

1. Do you think that the damage was caused by [pollution/earth movement]? [For this question, subjects could answer "Yes," "No," or "Can't Decide."]

2. You are one of 100 people who have volunteered to answer these questions. How many of the 100 do you think will agree with your answer to question one?

3. How confident are you in your answer to question one? [Subjects here could choose from "Not at all Confident," "Slightly Confident," "Moderately Confident," "Very Confident," or "Totally Confident."]

4. A complaint has been filed with the Commissioner of Insurance, complaining that [Pacific/Mountain] All-Risk was wrong in denying this claim. If the Commissioner concludes that All-Risk acted in bad faith, he can impose a fine of up to \$100,000. How much of a fine should the Commissioner impose on [Pacific/Mountain] All-Risk? [Subjects answering this question could choose one of seven ranges of damage amounts: "Zero," "Small fine (up to \$10,000)," "Moderate fine (\$40,000–\$60,000)," "Moderately large fine (\$60,000–\$90,000)," "Large fine (\$91,000–\$99,000)," or "Maximum fine (\$100,000)."⁹⁷]

As noted, each subject received a single scenario. We gathered subjects from a concession stand line in a busy park. Subjects were told that, in exchange for their anonymous participation in the study, a two dollar

97. The results from this question suggest that many participants simply were not able to translate their answers to the earlier questions into dollar amounts in any principled way—a finding consistent with empirical work on jury assessment of punitive damages. See Cass R. Sunstein et al., *Punitive Damages: How Juries Decide* 212 (2002) ("The present empirical studies . . . show that the major locus of unreliability and disorder in punitive damages decisions is in jurors' assessments of an appropriate dollar award . . ."). We do not discuss this question further, in that it falls outside the scope of this Essay.

donation would be made to a charity.⁹⁸ The four scenarios were presented at random to 120 individuals, with 30 people receiving each version.

2. Results and Discussion.

a. *The Pollution Scenario.* — There was no evidence in our data that people respond differently to the scenario depending on whether saying “yes” meant triggering insurance or excluding insurance. For example, fourteen of the thirty participants who responded to the insurance version answered “yes” when that answer meant that the insurance company would have to pay, and thirteen of the thirty participants who responded to the exclusion version answered “yes” when that answer meant that the insurance company would not have to pay. Similarly, the different versions did not produce a significant difference in subjects’ estimated percentages of agreement by other subjects. This in turn suggests, consistent with the literature on false consensus bias discussed in Part III, that whatever false consensus bias effect we find is not limited to individuals with a particular result-oriented agenda. Because there was no significant difference between the two versions, we combined the two groups of thirty subjects for further analysis. These combined results are presented in Table 1. The columns in Table 1 refer to the actual number of subjects giving each response (the “Number” column), the percentage that each number represents out of the sixty total responses (the “Actual Percentage” column), and the mean percentage of participants that subjects believed would agree with their own responses (the “Mean Estimated Percentage”).

TABLE 1: DO YOU THINK THE DAMAGE WAS CAUSED BY POLLUTION? HOW MANY PEOPLE OUT OF 100 DO YOU THINK WILL AGREE WITH YOUR ANSWER?

	Number	Actual Percentage	Mean Estimated Percentage
Yes	27	45.0	60.5
No	25	41.7	63.4
Can't Decide	8	13.3	38.4

For each pollution subject, we calculated her “error,” namely, the percentage of subjects that she believed agreed with her minus the percentage of subjects who actually agreed with her. The mean of these numbers was 19.4 (with a standard deviation of 22.4), which is significantly different from zero by the Wilcoxon test ($p < .001$).⁹⁹ Note that whatever the

98. We have made the donation, both on their behalf and on behalf of those who participated in a pilot study.

99. The Wilcoxon test is a statistical procedure used to compare the means of two populations that are not in a normal distribution. This study’s result is statistically significant. Typically, psychological studies demand only that $p < .05$ to reach significance. Our study was significant at the level of $p < .001$. The null hypothesis tested by the

answer ("yes," "no," "can't decide"), there was false consensus bias. People believed that their understanding of the story was significantly more common than was the reality.

In addition, participants were generally moderately to very confident in their answers to question one as shown in Table 2.

TABLE 2: HOW CONFIDENT ARE YOU IN YOUR ANSWER TO QUESTION ONE?

Confidence	Number
Not At All	1
Slightly	5
Moderately	29
Very	17
Totally	8

This finding suggests that not only do subjects overestimate the extent to which other participants understand the term the same way they do, but they are less likely to discover the extent to which there is disagreement, since they are comfortable with their own interpretations.

b. *The Earth Movement Scenario.* — The results for the earth movement scenarios were very similar to those for the pollution scenarios. Again, it made no difference whether answering "yes" triggered the insurance company's obligation to pay, or whether it triggered the application of the exclusion that absolved the insurance company from paying. For example, eleven out of the thirty participants who responded to the insurance version said that there was earth movement when that would mean that the insurer had to pay, and thirteen out of the thirty participants who responded to the exclusion version said that there was earth movement when that would mean that the insurer did not have to pay. Once again there was no significant difference between the groups in their estimates of agreement by other subjects. Consequently, the two groups were combined for further analysis. The responses of these combined groups are presented below in Table 3.

TABLE 3: DO YOU THINK THE DAMAGE WAS CAUSED BY EARTH MOVEMENT?
HOW MANY PEOPLE OUT OF 100 DO YOU THINK WILL AGREE WITH
YOUR ANSWER?

	Number	Actual Percentage	Mean Estimated Percentage
Yes	24	40	67.4
No	24	40	63.1
Can't Decide	12	20	36.5

Wilcoxon test was that the mean error is zero. The likelihood of that hypothesis being valid given the distribution of data is less than one in one thousand, according to the test.

As before, for each earth movement subject, we calculated her “error,” namely, the percentage of subjects that she believed agreed with her minus the percentage of subjects who actually agreed with her. The mean of these numbers was 23.5 (with a standard deviation of 20.7), significantly different from zero by the Wilcoxon test ($p < .001$). Once again, all three of the possible responses showed false consensus bias, with the differences between the actual and estimated percentages of agreement statistically significant for each of the three responses.

Subjects typically were moderately to very confident in their answers. The distribution of confidence levels is presented below in Table 4.

TABLE 4: HOW CONFIDENT ARE YOU IN YOUR ANSWER TO QUESTION ONE?

Confidence	Number
Not At All	2
Slightly	6
Moderately	22
Very	22
Totally	9

The goal of this study was to determine whether, when faced with nonprototypical scenarios, people (1) are in disagreement with one another, and (2) overestimate the extent to which their response is the predominant one. The results answer both of these questions affirmatively. Moreover, subjects were relatively confident in their answers to question one, whatever the scenario and whatever their answer.

B. Study 2: Judges as Subjects

1. *Experimental Materials and Procedure.* — In Study 2, we presented sixty-four state and federal judges attending a conference for judges with the same stories used in Study 1. However, we used only the version in which a “yes” answer meant that insurance would be excluded (the “exclusion version”).¹⁰⁰ The questions posed to the judges were identical to those in Study 1, except that we asked the judges about their agreement with both laypeople and other judges, as follows:

2. One hundred laypeople have volunteered to answer these questions. How many of the 100 do you think will agree with your answer to question one?
3. One hundred judges have volunteered to answer these questions. How many of the 100 do you think will agree with your answer to question one?

100. Reducing the number of experimental conditions permits stronger statistical inferences when the number of subjects is limited. Since there was no statistical difference between the “exclusion” and “insurance” versions in Study 1, we decided to use only the “exclusion” version in Study 2. That is the version that actually appears in the insurance policies that are the subject of litigation.

Like Study 1, each subject received a single scenario at random. Roughly half received the pollution scenario, and roughly half received the earth movement scenario.

2. *Results and Discussion.*

a. *The Pollution Scenario.* — Thirty-three judges answered questions connected with the pollution scenario. Judges were far more uniform in their responses than were laypeople. Only four judges answered “yes” to question one, indicating that most judges believed that the insurance company should have to pay. Nonetheless, the results suggest that judges are also subject to false consensus bias. Table 5 shows the judges’ answers to question one and question three, asking whether pollution caused the damage and how many judges were believed to be in agreement.

TABLE 5: DO YOU THINK THE DAMAGE WAS CAUSED BY POLLUTION? HOW MANY JUDGES OUT OF 100 DO YOU THINK WILL AGREE WITH YOUR ANSWER?

	Number	Actual Percentage	Mean Estimated Percentage (of judges in consensus)
Yes	4	12.1	69.5
No	20	60.6	68.8
Can't Decide	9	27.3	77.2

We calculated each judge’s “error” by subtracting the percentage of judges who actually agreed with her from her estimate of this agreement. The mean of these numbers was 25.88 (with a standard deviation of 26.19), significantly different from zero by the Wilcoxon test ($p < .001$).

Judges also overestimated the number of laypeople with whom they were in consensus. Table 6 below shows the difference in the percentage of laypeople who agreed with the judges (taken from Study 1) versus the judges’ estimates of their consensus with laypeople.

TABLE 6: ONE HUNDRED LAYPEOPLE HAVE VOLUNTEERED TO ANSWER THESE QUESTIONS. HOW MANY OF THE 100 DO YOU THINK WILL AGREE WITH YOUR ANSWER TO QUESTION ONE?

	Actual Percentage	Mean Estimated Percentage
Yes	45	73.8
No	41.6	50.3
Can't Decide	13.3	43.3

As we did before, for each judge we subtracted the percentage of laypeople who agreed with her judgment from the judge’s estimate of this per-

centage. The mean discrepancy was 16.9 (with a standard deviation of 22.6), significant by the Wilcoxon test ($p < .001$).

We also asked judges how confident they were that their answers to question one were correct. Judges were, for the most part, either moderately or very confident in their answers.

TABLE 7: HOW CONFIDENT ARE YOU IN YOUR ANSWER TO QUESTION ONE?

Confidence	Number
Not at all	3
Slightly	1
Moderately	13
Very	10
Totally	5

b. *The Earth Movement Scenario.* — The remaining thirty-one judges answered questions after reading the earth movement scenario. As in the pollution scenario, most judges answered “no” to the first question (whether the damage was caused by earth movement) and estimated that they would be in consensus with other colleagues at a rate of about 75%, regardless of their answers to question one. Therefore, the judges who answered “no” to question one were correct in estimating that approximately 70% of judges would agree with them. The judges who answered “yes” or “can’t decide,” in contrast, substantially overestimated their agreement with other judges. The table below shows the judges’ answers, along with the actual and estimated percentages of consensus among other judges.

TABLE 8: DO YOU THINK THE DAMAGE WAS CAUSED BY EARTH MOVEMENT?
HOW MANY JUDGES OUT OF 100 DO YOU THINK WILL AGREE WITH
YOUR ANSWER?

	Number	Actual Percentage	Mean Estimated Percentage (of judges in consensus)
Yes	7	22.6	71
No	22	71.0	72.5
Can’t Decide	2	6.5	79

Once again, we calculated each judge’s “error” by subtracting the percentage of judges who actually agreed with her from her own estimate of this agreement. The mean difference between estimated percent agreement and actual percent agreement was 15.03 (with a standard deviation of 28.3), significant by the Wilcoxon test ($p < .001$).

In addition, judges again overestimated their agreement with laypeople. Table 9 below shows the difference between the actual agreement between laypeople and judges and the judges' estimated agreement between the two groups.

TABLE 9: ONE HUNDRED LAYPEOPLE HAVE VOLUNTEERED TO ANSWER THESE QUESTIONS. HOW MANY OF THE 100 DO YOU THINK WILL AGREE WITH YOUR ANSWER TO QUESTION ONE?

	Actual Percentage	Mean Estimated Percentage
Yes	40	71.9
No	40	60.9
Can't Decide	20	16.5

For each judge, we calculated her "lay error," namely, her estimate of the percentage of laypeople who agree with her minus the percentage of lay subjects who actually agreed with her. The mean of these numbers was 21.8 (with a standard deviation of 19.3), which is significantly different from zero by the Wilcoxon test ($p < .001$).

Judges were also asked here to report how confident they were in deciding whether or not earth movement caused the damage in the scenario. Table 10, below, shows that judges' confidence in their answers was consistent with the confidence of both laypeople and with the judges who read the pollution scenario.

TABLE 10: HOW CONFIDENT ARE YOU IN YOUR ANSWER TO QUESTION ONE?

Confidence	Number
Not at all	2
Slightly	4
Moderately	13
Very	10
Totally	7

V. ANALYSIS AND RECOMMENDATIONS

This study raises potentially serious issues. If both judges and laypeople predictably understand legal terms differently from each other and *fail to recognize that fact*, then the legal system may be producing erroneous results. Parties might be prone to enter into agreements not knowing that they do not understand the terms the same way, and judges, because of false consensus bias, will not always recognize the legitimacy of the differences in understanding between the parties. Thus, a judge may consider language to be plain when in fact different people do not understand it the same way, and this may happen even when the judge's understanding is shared only by a minority of people in general. The result

may be a failure to consider extrinsic evidence because of an improper application of the parol evidence rule, a failure to apply *contra proferentum*, a mistaken ruling about the plain or ordinary meaning of the contractual terms, or any combination of these misapplications of operative legal principles.

Much insurance litigation involves events that may be seen either as nonprototypical instances of categories contained in the contract, or alternatively, as noninstances of those categories.¹⁰¹ A study of the parol evidence rule cases in two jurisdictions has shown similar results.¹⁰² Disputes over the application of the parol evidence rule most often concern how well the words of a contract fit a set of events that have occurred in the world.

Obviously, we cannot predict how often this happens, but there is some reason for optimism. As discussed earlier, these problems arise as a consequence of the dissipation of consensus when people use words to describe nonparadigmatic situations.¹⁰³ But by definition, the paradigmatic situations are those about which the contract was written to address. Thus, most of the time, the recurrent situations that brought about the contractual language in the first place will be handled without significant controversy. A contract that excludes coverage for “earth movement” applies by its plain language to earthquakes and mudslides. By the same token, many situations uncontroversially have nothing to do with earth movement, and no one would think that they do. The same holds true for pollution exclusion clauses.

The results in the survey of judges (Study 2) confirm these conclusions by showing that in nonprototypical or hard cases, judges tend to come to the same conclusions as other judges. But judges themselves are susceptible to false consensus bias when they assume that their interpretations represent the general consensus among other judges and laypeople. If we understand ambiguity to include disagreements among people about whether language applies to the situation at hand, then false consensus bias among judges presents a problem: It indicates that the first question that judges must ask before applying principles of interpretation—whether the disputed language is ambiguous—may not be answered correctly in many cases. Given the results of our Study 2, it should not be surprising that judges in different jurisdictions, examining very similar contractual language, arrive at opposite results.

For the judges who answered that they “can’t decide” whether pollution or earth movement caused the damage in the scenario (13.3% and 6.5% of the judges, respectively), false consensus bias is harmless to the

101. For examples in the context of asbestos litigation, see Jeffrey W. Stempel, *Assessing the Coverage Carnage: Asbestos Liability and Insurance After Three Decades of Dispute*, 12 *Conn. Ins. L.J.* 349, 393–406 (2006).

102. Lawrence M. Solan, *The Written Contract as Safe Harbor for Dishonest Conduct*, 77 *Chi.-Kent L. Rev.* 87, 103 (2001).

103. See *supra* text accompanying notes 36–42.

extent that such an understanding is good enough to cause the judge to hold the language ambiguous as a legal matter. For the most part, though, false consensus bias, whether among parties or judges, compromises rule of law values when it occurs and is not rooted out by the system at some point in the legal process. In the scenarios studied here, judges who understood there to be pollution or earth movement were very susceptible to false consensus bias. For example, while only 22.6% of the judges said "yes" to whether the damage was caused by earth movement, those same judges believed, on average, that 71% of judges asked this question would be in agreement with them. And while they were actually in agreement with 40% of our lay subjects, they believed that they would be in agreement with 71.9% of laypeople. The results of the scenarios involving pollution are similar. Judges with these views may rule that the plain language of the policy, or at least its ordinary meaning, must result in a ruling in favor of the insurance company when in fact the language is far from plain.

False consensus bias may further explain one reason why parties in disputes appear to be so intransigent. The problem is exacerbated, to the extent that our study is indicative, by the fact that the consensus bias effect was so strong that people who were actually in agreement with a minority of other participants typically believed that they were in about a 60 to 70% majority.¹⁰⁴ Given the preponderance of the evidence standard for the burden of proof in civil litigation, this effect may well be strong enough to convince parties to continue to litigate their position when in fact their own interpretation accords with less than half of people who interpret the same language.

There are several ways for courts to combat the propensity to engage in false consensus bias. First, our study suggests that judges should take far more seriously disagreement among courts, and at times, between parties. The very fact that different disinterested decisionmakers do not look at the same language the same way should provide evidence that some kind of conceptual problem is present. Judges should be made aware that consensus really does dissipate when we leave the prototype, and that predictable cognitive variation can explain the differences among judges.¹⁰⁵

104. See, e.g., *supra* Table 1 (showing laypeople in 45% and 41.7% minority estimated consensus by, respectively, 60.5% and 63.4% of other laypeople) and *supra* Table 3 (40% and 40%, estimated respectively as 67.4% and 63.1%).

105. This is not to say that cognitive preference explains all differences among judges in interpreting legal texts. When more than one interpretation is possible, no doubt politics plays at least some role in determining which judges prefer which interpretation. See Thomas J. Miles & Cass R. Sunstein, *Do Judges Make Regulatory Policy? An Empirical Investigation of Chevron*, 73 U. Chi. L. Rev. 823, 826 (2006) (demonstrating that liberal judges defer more to liberal agency interpretations of statutes, and that conservative judges defer more to conservative agency interpretations). Nonetheless, judges operate within a range of legitimate interpretations, and they should recognize this fact in deciding whether contractual language is ambiguous.

Second, at the very least, judges sitting on appellate panels should take seriously disagreements among themselves in their initial understanding of language as possible evidence that there is no single understanding of a term in dispute. Appellate panels permit judges to discuss and resolve their differences. Differences in interpretation among judges sitting on the same panel should be taken seriously as evidence that the understandings of the parties may be in legitimate disagreement, even when each of the judges is confident that the language is clear. Our studies suggest that the disagreement itself is more probative of ambiguity than is a judge's confidence (or lack thereof) in any particular interpretation, especially when judges are equally confident of interpretations that are mutually inconsistent.

Finally, courts should be aware of the significant advantage that false consensus bias gives to repeat players in contractual relations and correct for it. Insurance company drafters, based on experience with prior litigation, can take advantage of their superior knowledge by writing policies with broad language. The policyholders, in contrast, are not likely to think in advance of the wide range of situations in which the company will later attempt to have exclusions apply.¹⁰⁶ Furthermore, insurers can (and do) accomplish this goal more effectively by writing definitions into the policies that make it harder for judges to construe these policies more narrowly.¹⁰⁷

The results reported here suggest that courts should be more aggressive in using such principles as interpreting insurance policies consistent with the reasonable interpretation of the insured,¹⁰⁸ analyzing insurance

106. For discussion of the advantages of repeat players in contractual relations, see Randy E. Barnett, *The Sound of Silence: Default Rules and Contractual Consent*, 78 Va. L. Rev. 821, 887–92 (1992).

107. See, e.g., *Cont'l Cas. Co. v. Advance Terrazzo & Tile Co.*, 462 F.3d 1002, 1009 (8th Cir. 2006) (finding absolute pollution exclusion as defined in policy precluded coverage); *Firemen's Ins. Co. v. Kline & Son Cement Repair, Inc.*, 474 F. Supp. 2d 779, 796–97 (E.D. Va. 2007) (granting summary judgment in favor of insurer in pollution exclusion case based on broad definitions in policy).

108. See, e.g., *Unified W. Grocers, Inc. v. Twin City Fire Ins. Co.*, 457 F.3d 1106, 1116 (9th Cir. 2006) (“[A] court that is faced with an argument for coverage based on assertedly ambiguous policy language must first attempt to determine whether coverage is consistent with the insured’s objectively reasonable expectations.” (quoting *Bank of the W. v. Superior Court*, 833 P.2d 545, 552 (Cal. 1992))). For discussion, see Kenneth S. Abraham, *The Expectations Principle as a Regulative Ideal*, 5 Conn. Ins. L.J. 59, 61–67 (1998) (describing scope of reasonable expectations “doctrine,” but arguing that reasonable expectations “principle” underlying doctrine informs much of insurance law); Kenneth S. Abraham, *Judge-Made Law and Judge-Made Insurance: Honoring the Reasonable Expectations of the Insured*, 67 Va. L. Rev. 1151, 1152–54 (1981) (summarizing judicial development of reasonable expectations doctrine); see also W. David Slawson, *Contractual Discretionary Power: A Law to Prevent Deceptive Contracting by Standard Form*, 2006 Mich. St. L. Rev. 853, 877–80 (proposing reasonable expectations doctrine be replaced with stronger doctrine regulating exercise of discretionary drafting power); W. David Slawson, *The New Meaning of Contract: The Transformation of*

policies for substantive defects that may lead to market failures,¹⁰⁹ and resolving ambiguities against the party that has attempted in advance to take advantage of the other party's differing understanding.¹¹⁰ If insurers wish to exclude nonprototypical instances of events that many would not think of as coming within the exclusion, they should do so clearly by making these scenarios and their exclusion especially salient in the contract.¹¹¹

For example, insurers know from experience the kinds of scenarios that routinely lead to disputes over the scope of pollution exclusion clauses. Policyholders, in contrast, are not likely to have any experience with such questions as what should count as "pollution" if an unforeseen injury occurs. In such cases, insurers should be required to make salient, perhaps through the use of examples, the fact that they are using such terminology in an especially broad manner that might include some things that people would not ordinarily consider to be pollution. This would place more of the risk of false consensus bias on insurers, who are in a position to write policies that focus the policyholder's attention on language that is likely to lead to disagreement about coverage. Insurance companies frequently make decisions that involve shifting risks to the party in the best position to avoid harm.¹¹² This Essay suggests that they should act similarly with respect to their own role in creating interpretive environments in which courts may find clarity in favor of the insurers where serious disagreements actually exist.

CONCLUSION

Our studies strongly suggest that both laypeople and judges are subject to false consensus bias in deciding whether nonprototypical situations fit within contractual language. This should not be surprising, since the underlying psychological literature suggests that both the dissipation of consensus and false consensus bias are robust phenomena. We have made specific recommendations for how the legal system might reduce the rate of error that emanates from the exaggeration of the "normalcy" of one's interpretation of a contract.

Contracts Law by Standard Forms, 46 U. Pitt. L. Rev. 21, 23 (1984) (defining reasonable expectations of parties from whatever source as new meaning of contracts).

109. See Daniel Schwarcz, *A Products Liability Theory for the Judicial Regulation of Insurance Policies*, 48 Wm. & Mary L. Rev. 1389, 1435-59 (2007) (arguing that courts should apply products liability law in analyzing insurance policies for design defects or failures to warn consumers of pitfalls).

110. See Restatement (Second) of Contracts § 201 (1981).

111. See Russell Korobkin, *Bounded Rationality, Standard Form Contracts, and Unconscionability*, 70 U. Chi. L. Rev. 1203, 1279-83 (2003) (proposing that courts provide presumptive validity to salient contract terms in unconscionability determinations).

112. For recent discussion of this role in the context of corporate directors' and officers' liability insurance, see Tom Baker & Sean J. Griffith, *Predicting Corporate Governance Risk: Evidence from the Directors' & Officers' Liability Insurance Market*, 74 U. Chi. L. Rev. 487, 533-34 (2007).

The phenomena discussed in this Essay in all likelihood occur in circumstances far broader than the insurance contracts we discuss. For example, the appellate reporters contain many opinions in which judges are in disagreement over the application of statutory language. Principles such as the rule of lenity, which tells courts to resolve ambiguous language in penal statutes in favor of criminal defendants, also rely upon an initial determination of whether language is ambiguous.¹¹³ It would not be the least bit surprising to learn that false consensus bias colors judicial decisions in statutory cases as well as in contractual cases. We therefore caution judges to take seriously the positions of other judges in these cases as well, as reflected both in earlier decisions and in the interactions among judges sitting on appellate panels. We also hope to have motivated additional, theoretically-driven empirical research into the interpretation of both contracts and statutes.

113. For discussion of some of the interpretive issues in such cases, see Lawrence M. Solan, *Law, Language, and Lenity*, 40 *Wm. & Mary L. Rev.* 57, 62–75 (1998).

APPENDIX: CATCH TRIALS

UNAMBIGUOUSLY POLLUTION

Bill Taylor owns and operates a uranium mill on a 1.4 square mile site in Springfield. The site contains an active alkaline processing mill and two waste disposal ponds. The mill operates by extracting crude uranium oxide from uranium ore for sale to nuclear power plants. As part of this milling process, a large residue of liquid sludge is piped into the waste disposal ponds. This sludge contains a mixture of radioactive and nonradioactive, but still toxic, materials.

Fifteen years after the opening of the plant, residents of nearby Capital City all began to experience similar illnesses. The Capital City public health office and local doctors determined that the sicknesses were caused by the liquid sludge that had been disposed of by the Taylor mill, and that seeped into their drinking water.

The residents sued and won. Bill Taylor filed a claim with his insurance company, Pacific All-Risk, for the amount of the judgment against him. The Pacific All-Risk insurance policy contains an exclusion for damage caused by "pollution in the environment." If the toxic sludge seeping from the lake into the Capital City drinking water is considered pollution, Pacific All-Risk does not have to pay Bill Taylor's claim. Pacific All-Risk does refuse to pay the claim, citing the pollution exclusion.

UNAMBIGUOUSLY NOT POLLUTION

Donna Martin owns a dress shop called "Now Wear This" on Melrose Avenue in Beverly Hills, California. During the busy holiday season, Donna's store was packed with shoppers. One of those shoppers accidentally spilled her Orange Mocha Frappuccino across the doorway of the store on her way out. Before anyone had a chance to clean up the spill, another customer, Sydney Andrews, walked in. Immediately, she slipped on the spilled coffee, fell, and broke her leg in three places.

Sydney sued Donna for damages resulting from her injury and won. Donna filed a claim with her insurance company, Pacific All-Risk. Pacific All-Risk has an exclusion in their policy for injuries caused by "pollution in the environment." If the Orange Mocha Frappuccino is considered pollution, Pacific All-Risk does not have to pay Donna Martin's claim. Pacific All-Risk does refuse to pay, citing the exclusion.