

3-1-2019

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CONTRACT INTERPRETATION ENFORCEMENT COSTS: AN EMPIRICAL STUDY OF TEXTUALISM VERSUS CONTEXTUALISM CONDUCTED VIA THE WEST KEY NUMBER SYSTEM

Joshua M. Silverstein*

This Article sets forth an empirical study of a central issue in the judicial and academic debate over the optimal method of contract interpretation: Whether “textualism” or “contextualism” best minimizes contract enforcement costs. The study measured enforcement costs in twelve ways. Under each of those measures, there was no statistically significant difference in the level of interpretation litigation between textualist and contextualist regimes. Accordingly, the study finds no support for either the textualist hypothesis that contextualism has higher enforcement costs or the contextualist counter-hypothesis that textualism has higher enforcement costs.

The study herein was conducted via the West Key Number System. It is the second study of contract interpretation enforcement costs that I have completed employing that tool. In a prior article, I presented the first study and discussed how to use the Key Number System for empirical research generally. This paper expands on the analysis of the Key Number System from the earlier article. It also addresses how the complexity and confusion in the interpretation caselaw create challenges for empirical work concerning contract interpretation.

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I would like to thank Javitt Adili, Ken Gallant, Nick Kahn-Fogel, Phyllis Silverstein, and Robert Steinbuch for their comments on drafts of this Article. In addition, my thanks to the various Thomson Reuters reference attorneys and other staff members who helped me obtain answers to multiple questions regarding the Key Number System and several related Thomson Reuters products. Finally, I would like to thank Samantha Davidson, Mary Ernhart, Kyla Farler, Lauren Guinn, Whitney Ohlhausen, and Cara Tomlinson for their invaluable research assistance in preparing this Article.

TABLE OF CONTENTS

I. INTRODUCTION	1013
II. CONTRACT INTERPRETATION	1017
<i>A. The Textualist and Contextualist Approaches</i>	1017
<i>B. The Enforcement Costs Policy Debate</i>	1020
III. THE WEST KEY NUMBER SYSTEM AS A DATA COLLECTION AND CODING DEVICE	1025
IV. PRIOR EMPIRICAL STUDY OF THE IMPACT OF THE TEXTUALIST AND CONTEXTUALIST APPROACHES ON ENFORCEMENT COSTS	1029
V. PROPOSED ADDITIONAL STUDIES	1037
<i>A. Study Two: More States</i>	1039
<i>B. Study Three: More Key Numbers</i>	1040
1. Logistical Challenges	1042
2. Technical Challenges	1049
3. Methodological Challenges	1052
<i>C. Study Four: Interpretive Change Across Time</i>	1058
<i>D. Study Five: Two Interpretive Systems</i> <i>Within a Single State</i>	1061
1. Partial Contextualism Under the Uniform Commercial Code	1065
2. Quasi-Textualism Under the Uniform Commercial Code	1075
3. Partial Contextualism Under the Common Law	1082
VI. STUDY FOUR: TEXTUALIST INTERPRETATION VERSUS CONTEXTUALIST INTERPRETATION IN STATES THAT SWITCHED FROM TEXTUALISM TO CONTEXTUALISM	1085
<i>A. Study Methodology and Results</i>	1085
<i>B. Discussion</i>	1092
VII. CONCLUSION	1096
APPENDIX: WESTLAW SEARCHES USED IN THE STUDY	1096

I. INTRODUCTION

Contract interpretation is one of the most important topics in commercial law.¹ It lies at the heart of contract doctrine, which contains numerous rules designed to address the construction of agreements.² And interpretive disputes constitute the largest source of contract litigation.³ In fact, contractual meaning may be the most frequently contested issue in civil cases generally.⁴ The significance of contract interpretation explains why the field has received extensive academic attention since the turn of the century.⁵ And the subject is recognized as “the least settled, most contentious area of contemporary contract doctrine and scholarship.”⁶

The central policy issue in contract interpretation is the role of extrinsic evidence in the interpretive process.⁷ The rules regarding such

1. See STEVEN J. BURTON, *ELEMENTS OF CONTRACT INTERPRETATION* 1 (2009) (“Issues of contract interpretation are important in American law.”).

2. See Benjamin E. Hermalin et al., *Contract Law*, in 1 *HANDBOOK OF LAW AND ECONOMICS* 3, 68 (A. Mitchell Polinsky & Steven Shavell eds., 2007) (“The problem of contract interpretation thus provides a central backdrop for the law of contracts, which contains many rules and principles that are designed to address it.”); Melvin Aron Eisenberg, *Expression Rules in Contract Law and Problems of Offer and Acceptance*, 82 CALIF. L. REV. 1127, 1127 (1994) (“The issue of interpretation is central to contract law, because a major goal of that body of law is to facilitate the power of self-governing parties to further their shared objectives through contracting.” (emphasis omitted)).

3. Hermalin et al., *supra* note 2, at 68 (“Probably the most common source of contractual disputes is differences in interpretation”); Alan Schwartz & Robert E. Scott, *Contract Interpretation Redux*, 119 YALE L.J. 926, 928 & n.3 (2010) (“[C]ontract interpretation remains the largest single source of contract litigation between business firms.”) (collecting authorities).

4. See BURTON, *supra* note 1, at 1.

5. See Steven J. Burton, *A Lesson on Some Limits of Economic Analysis: Schwartz and Scott on Contract Interpretation*, 88 IND. L.J. 339, 340 & n.8 (2013) (“After decades of relative neglect, contract interpretation became a hot topic of scholarly debate after 2003.”) (collecting authorities); David McLauchlan, *Contract Interpretation: What Is It About?*, 31 SYDNEY L. REV. 5, 5 & n.1 (2009) (“In recent times contract interpretation has become one of the most contentious areas of the law of contract.”).

6. Ronald J. Gilson et al., *Text and Context: Contract Interpretation as Contract Design*, 100 CORNELL L. REV. 23, 25 (2014).

7. Hermalin et al., *supra* note 2, at 88-89 (“The key policy question underlying contract interpretation is how thorough the interpretive process should be; and this question is commonly articulated in terms of the dichotomy of form and substance.”); accord PETER A. ALCES, *A THEORY OF CONTRACT LAW: EMPIRICAL INSIGHTS AND MORAL PSYCHOLOGY* 152-53 (2011) (“The parol or extrinsic evidence tension in contract is fundamental; it concerns the very foundations of agreement”); GERARD MCMEEL, *THE CONSTRUCTION OF CONTRACTS: INTERPRETATION, IMPLICATION, AND RECTIFICATION* § 5.01, at 162 (2d ed. 2011) (“One of the most controversial areas in the principles governing the interpretation of contracts is the question of what materials are admissible to assist the court in carrying out the task.”); *id.* at 162-65 (focusing on contract interpretation in jurisdictions outside the United States, particularly England and other common law nations); Aaron D. Goldstein, *The Public Meaning Rule: Reconciling Meaning, Intent, and Contract Interpretation*, 53 SANTA CLARA L. REV. 73, 74 (2013) (“When and what kinds of extrinsic

evidence can influence virtually every aspect of the parties' contractual relationship.⁸ As a result, numerous factors are relevant in deciding the optimal interpretive regime.⁹ It should thus not be surprising that there is fierce debate among courts and scholars over the proper approach to extrinsic evidence.¹⁰

The disputants are organized into two basic camps. "Textualist" judges and commentators argue that the interpretation of contracts should focus primarily on the language contained within the four corners of written agreements. According to this view, extrinsic evidence—such as preliminary negotiations, the surrounding commercial circumstances, course of performance, course of dealing, and usage of trade—is of secondary importance, and many contracts can and should be interpreted without these materials. "Contextualists," in contrast, believe that courts generally ought to examine both the language of the parties' agreement and extrinsic evidence when determining contractual meaning.¹¹

The textualist/contextualist controversy cannot be resolved in the abstract. It raises dozens of questions about the real world that are answerable only via observation and statistical analysis.¹² Unfortunately, empirical evidence bearing on this debate is sorely lacking.¹³ Data-driven research is beyond the province of the judicial process. The responsibility for completing such work thus falls principally to academics. But scholarship concerning contract interpretation is almost

evidence should courts admit in order to interpret the meaning of a contract? . . . [T]he answer has profound implications for whether courts achieve the goals of predictability and fairness that motivate the law of contracts."); William C. Whitford, *The Role of the Jury (and the Fact/Law Distinction) in the Interpretation of Written Contracts*, 2001 WIS. L. REV. 931, 939 ("The great issue in [parol evidence rule] scholarship, debated endlessly over the years, and with ample case law available to support all points of view, is how a court should determine whether a writing is ambiguous or incomplete.").

8. Hermalin et al., *supra* note 2, at 90 ("The regime of contract interpretation will influence contracting parties' behavior in many respects: with regard to decisions to breach, to take advance precautions, to mitigate damages, to gather and communicate information, to allocate risk, to make reliance investments, to behave opportunistically, and to spend resources in litigation, and so on.").

9. *Id.* ("The considerations that determine the optimal approach to contract interpretation are thus quite broad-ranging."); see *id.* at 90-91 (setting forth a list of some of the key considerations).

10. Juliet P. Kostritsky, *Plain Meaning vs. Broad Interpretation: How the Risk of Opportunism Defeats a Unitary Default Rule for Interpretation*, 96 KY. L.J. 43, 54 (2007) ("Scholars have fiercely debated the proper approach for courts to take in interpreting contracts."); McLauchlan, *supra* note 5, at 5 ("There are fundamental divisions among commentators, practitioners and judges . . . as to the nature of the task and the permissible aids to interpretation.").

11. See *infra* Part II.A.

12. Joshua M. Silverstein, *Using the West Key Number System as a Data Collection and Coding Device for Empirical Legal Scholarship: Demonstrating the Method Via a Study of Contract Interpretation*, 34 J.L. & COM. 203, 283-84 (2016); *id.* at 284 n.437 (collecting authorities that have reached the same conclusion).

13. *Id.* at 284 & n.438.

always theoretical in nature. As a result, there are exceptionally few empirical studies of interpretive issues.¹⁴ This Article contains such a study. The Article is actually the second of two pieces setting forth empirical research regarding the textualist/contextualist debate.

Perhaps the signature claim advanced by textualists in defense of their position is that contextualism results in more litigation over the meaning of contracts than textualism. In other words, enforcement costs are higher in a contextualist regime. Many contextualists disagree; they maintain that enforcement costs are actually larger under textualism.¹⁵ My first article concerned this debate and it set forth an empirical study designed to test which side is correct.¹⁶ The study compared the level of interpretation litigation in a group of textualist states to the level in a group of contextualist states using fourteen distinct measures.¹⁷ Under one measure, there was more litigation in the textualist group by a statistically significant amount.¹⁸ But under the other thirteen measures, there was no statistically significant difference between the textualist and contextualist jurisdictions.¹⁹ I thus concluded that my study provided no support for the textualist hypothesis that enforcement costs are greater under contextualism, and very little support for the contextualist counter-hypothesis that textualism has higher enforcement costs.²⁰

This study was actually part of a broader project. The primary purpose of my first article (which I shall refer to as “Article One”) was to explain how researchers can use the West Key Number System to dramatically streamline the process of data collection and coding that is central to most empirical work.²¹ Collecting and coding data is normally a resource-intensive process, requiring expenditures of time and money that go well beyond what is necessary for doctrinal and theoretical scholarship.²² Any tool capable of reducing these outlays holds considerable value. My principal goal in Article One was to set forth an argument that West’s Key Number System is one such tool. Accordingly, a substantial portion of the paper focused on the methodological questions raised by employing the Key Number System as a data collection and coding device.²³ The empirical study of

14. *Id.*

15. *See infra* Part II.B.

16. *See Silverstein, supra* note 12, at 253-300.

17. *See id.* at 284-300.

18. *Id.* at 298-99, app. 2 at 317, 320-21 tbl.6.

19. *Id.* at 295-300, app. 2 at 317-24.

20. *Id.* at 299-300.

21. *Id.* at 207.

22. *Id.* at 210-11, 210 n.27 (collecting authorities).

23. *See id.* at 209-53, 286-94.

interpretation enforcement costs was intended both to serve as a demonstration of the Key Number System in action *and* contribute to the empirical literature regarding contract law.²⁴

In the concluding section of Article One, I discussed four potential follow-up studies that would also utilize the Key Number System to compare litigation levels under textualism and contextualism.²⁵ Each project had the potential to (1) add to the body of evidence regarding which approach to contract interpretation best minimizes enforcement costs, and (2) further illustrate how to use the Key Number System for empirical research.²⁶ This Article concerns those four studies.²⁷

After considerable analysis, I determined that three of the proposed studies are subject to fatal feasibility issues. The decisive problem for two projects is that the contract interpretation caselaw appears too convoluted to classify the requisite number of states as either textualist or contextualist.²⁸ A third project suffers from critical logistical and technical challenges—challenges that many researchers will face when attempting to conduct empirical research using the Key Number System.²⁹

I was able to complete the fourth study.³⁰ In that project, there was no statistically significant difference between textualism and contextualism with respect to the quantity of contract interpretation litigation under any of the twelve measures employed.³¹ Therefore, the findings presented in this Article do not support either the textualist hypothesis or the contextualist counter-hypothesis.

As with the study in Article One, the protocol I used for the project in this paper has important methodological limitations.³² But the results of the study conducted here nonetheless constitute important evidence regarding the debate over the optimal method of contract interpretation. And the description below of the issues I faced in attempting to complete each of the four proposed studies³³ should (1) provide important guidance to future researchers conducting empirical work, whether they choose to utilize the Key Number System for data collection and coding

24. *Id.* at 207-08, 283-84, 308.

25. *See id.* at 308-10.

26. *See id.* at 308-12.

27. *See infra* Parts V, VI.

28. *See infra* Parts V.A, V.D.

29. *See infra* Part V.B.

30. *See infra* Parts V.C, VI.

31. *See infra* Part VI.A.

32. *See infra* Parts III, V.C, VI.

33. *See infra* Parts V, VI.

or deploy an alternative technique, such as manual coding, and (2) clarify several aspects of the contract interpretation caselaw.

Part II of this Article briefly describes the textualist and contextualist approaches to contract interpretation and summarizes the policy debate over which approach best minimizes enforcement costs.³⁴ Part III reviews the advantages and disadvantages of using the Key Number System as a data collection and coding device that were discussed in Article One.³⁵ Part IV contains a synopsis of the empirical study set forth in my prior article.³⁶ Part V describes the four additional proposed studies and explains why I did not finish three of the projects.³⁷ Part VI discusses the specific methodology and results of the completed study.³⁸ Finally, Part VII contains some closing thoughts.³⁹

II. CONTRACT INTERPRETATION

A. The Textualist and Contextualist Approaches

The purpose of contract interpretation is to ascertain the intentions of the parties at the time the agreement was formed.⁴⁰ To accomplish this goal, textualist courts follow what is called the “plain meaning rule” or “four-corners rule.” That rule sets forth a two-stage process. During the first stage, the court assesses whether the contract is ambiguous. An ambiguity exists when the relevant contractual language is “reasonably susceptible” to more than one meaning. The ambiguity determination is a question of law for the judge. In making that determination, the judge may consider only the contract itself; the investigation is restricted to the “four corners” of the document. If the court concludes that the contract is unambiguous, it simply applies the unambiguous, “plain meaning” of the language to the facts of the case. The judge never reviews any extrinsic evidence. If the court decides that the contract is ambiguous, then the case moves to the second stage—resolving the ambiguity. At that stage, interpretation is a question of fact and extrinsic evidence regarding the intent of the parties may be considered. When the parties

34. *See infra* Part II.

35. *See infra* Part III.

36. *See infra* Part IV.

37. *See infra* Part V.

38. *See infra* Part VI.

39. *See infra* Part VII.

40. This subpart is an abbreviated version of the overview of the contract interpretation caselaw set forth in Article One. *See* Silverstein, *supra* note 12, at 253–61. The description of interpretation doctrine in that article is more detailed and contains extensive citations to primary and secondary authority. *See id.*

do not submit any extrinsic evidence, or when the evidence presented is so one-sided that there is no genuine issue of material fact regarding the contract's meaning, then the judge resolves the ambiguity, typically via summary judgment. If the parties submit extrinsic evidence *and* a reasonable jury could rule for either side, then the jury resolves the ambiguity at trial.⁴¹

Contextualism generally involves the same two-stage process. But the contextualist approach differs in the method used to establish whether a contract is ambiguous. According to this view, both the language of the agreement *and* extrinsic evidence are relevant in deciding if an ambiguity exists. In other words, at stage one, the judge must consider extrinsic evidence proffered by the parties, something prohibited by textualism. However, the ambiguity issue is still a question of law for the judge.⁴²

Both textualist and contextualist courts consider all extrinsic evidence at stage two once a contract is determined to be ambiguous. The touchstone of their disagreement is whether evidence may be considered during stage one in making the ambiguity determination: Textualism only recognizes patent ambiguities (also known as facial or intrinsic ambiguities), which are ambiguities that appear within the four corners of a written agreement; contextualism recognizes both patent and latent (or extrinsic) ambiguities, the latter of which become apparent only upon the review of extrinsic evidence.⁴³

41. *Id.* at 255-56.

42. *Id.* at 256-57.

43. *Id.* at 257-58. While this is generally an apt explanation, there is an important qualification. Textualist courts *do* recognize one type of latent ambiguity—what one might call “subject-matter latent ambiguities.” These are ambiguities that result when the language of the contract is applied to the real world—typically, to the subject matter of the agreement: “Latent ambiguity can arise where language, clear on its face, fails to resolve an uncertainty when juxtaposed with circumstances in the world that the language is supposed to govern.” *Charter Oil Co. v. Am. Emp’rs’ Ins. Co.*, 69 F.3d 1160, 1167 (D.C. Cir. 1995); *accord* *Knipe Land Co. v. Robertson*, 259 P.3d 595, 601 (Idaho 2011) (“A latent ambiguity exists where an instrument is clear on its face, but loses that clarity when applied to the facts as they exist.”).

The paradigms of subject-matter latent ambiguity are where language in a contract is intended to identify a single item in the world, but instead: (1) two or more items fit the description; or (2) nothing in the world fits the description. *See* *University City v. Home Fire & Marine Ins. Co.*, 114 F.2d 288, 295-96 (8th Cir. 1940) (“A latent ambiguity may be one in which the description of the property is clear upon the face of the instrument, but it turns out that there is more than one estate to which the description applies; or it may be one where the property is imperfectly or in some respects erroneously described, so as not to refer with precision to any particular object.”); *see also* *Williams v. Idaho Potato Starch Co.*, 245 P.2d 1045, 1048-49 (Idaho 1952) (“Where a writing contains a reference to an object or thing, . . . and it is shown by extrinsic evidence that there are two or more things or objects . . . to which [the writing] might properly apply, a latent ambiguity arises.” (citations omitted)). The classic example is the case of *Raffles v. Wichelhaus* (1916) 159 Eng. Rep. 375. There, the parties’ contract provided, in perfectly clear terms, that certain cotton

would arrive on the ship “Peerless.” *Id.* at 375-76. But there were two ships with that name, creating an ambiguity that only became apparent when the language of the agreement was applied to the subject matter of the contract—the cotton on the ship “Peerless.” *Id.*

There is a compelling conceptual argument that textualist jurisdictions have no choice but to allow for subject-matter latent ambiguities. Judge Posner explains: “The contract’s words point out to the real world, and the real world may contain features that make seemingly clear words, sentences, and even entire documents ambiguous.” Richard A. Posner, *The Law and Economics of Contract Interpretation*, 83 TEX. L. REV. 1581, 1597-98 (2005) (citing *Raffles v. Wichelhaus*, 159 Eng. Rep.). Not surprisingly then, numerous authorities from textualist states recognize this type of latent ambiguity. *See, e.g.*, *Eureka Water Co. v. Nestle Waters N. Am., Inc.*, 690 F.3d 1139, 1152-53 (10th Cir. 2012) (applying Oklahoma law and explaining that subject-matter latent ambiguities are an exception to the general rule that extrinsic evidence may not be used to interpret a facially unambiguous contract); *Knipe Land Co.*, 259 P.3d at 601 (“Although parol evidence generally cannot be submitted to contradict, vary, add or subtract from the terms of a written agreement that is deemed unambiguous on its face, there is an exception to this general rule where a [subject-matter] latent ambiguity appears.”); *Teig v. Suffolk Oral Surgery Assocs.*, 769 N.Y.S.2d 599, 600 (App. Div. 2003) (“Even where an agreement seems clear on its face, a ‘latent ambiguity’ may exist by reason of ‘the ambiguous or obscure state of extrinsic circumstances to which the words of the instrument refer.’” (quoting *Lerner v. Lerner*, 508 N.Y.S.2d 191, 194 (App. Div. 1986))); *Friendswood Dev. Co. v. McDade + Co.*, 926 S.W.2d 280, 282-83 (Tex. 1996) (“A latent ambiguity exists when a contract is unambiguous on its face, but fails by reason of some collateral matter when it is applied to the subject matter with which it deals.”). And subject-matter latent ambiguities frequently arise with respect to contracts that contain real estate descriptions. *See, e.g.*, *Emerald Pointe, L.L.C. v. Jonak*, 202 S.W.3d 652, 659 (Mo. Ct. App. 2006) (“Where an uncertainty in the description of land conveyed does not appear upon the face of the deed but evidence discloses that the description applies equally to two or more parcels, a latent ambiguity is said to exist and extrinsic evidence or parol evidence is admissible to show which tract or parcel of land was intended.” (quoting *Wolf v. Miravalle*, 372 S.W.2d 28, 32 (Mo. 1963))); *Meyer v. Stout*, 914 N.Y.S.2d 834, 836-37 (App. Div. 2010) (holding that a deed for the sale of land contained a latent ambiguity because an easement description set forth in the deed improperly referenced property that the seller did not actually own); *see also Nat’l Union Fire Ins. Co. v. CBI Indus., Inc.*, 907 S.W.2d 517, 520 n.4 (Tex. 1995) (setting forth the following hypothetical to illustrate the concept of a latent ambiguity: “if a contract called for goods to be delivered to ‘the green house on Pecan Street,’ and there were in fact two green houses on the street, it would be latently ambiguous”).

Non-subject-matter latent ambiguities—the type that should be recognized only by contextualist jurisdictions—typically occur when the contracting parties use a word or phrase in an unconventional way, such as when they employ a special industry dialect. *See* RICHARD LORD, 12 WILLISTON ON CONTRACTS § 34:1, at 8-9 (4th ed. 2012) (“Indeed, often terms that are unambiguous on their face may be ambiguous or have a different meaning as a matter of fact, as when the terms have both an ordinary meaning and a special trade meaning.”). This second category of latent ambiguities might usefully be described as “non-standard-meaning latent ambiguities.” To illustrate, in *Western States Construction Co. v. United States*, the issue was whether a contract provision concerning “metallic pipes” applied to pipes made of cast iron. 26 Cl. Ct. 818, 819-20 (1992). The court explained that while the “dictionary definition of ‘metallic pipes’ would embrace [pipes made of cast iron],” a latent ambiguity was established by extrinsic evidence of an industry trade usage that the phrase “metallic pipes” excludes pipe made of cast iron. *Id.* at 826.

Note that “subject-matter latent ambiguity” and “non-standard-meaning latent ambiguity” are phrases that I created to provide greater conceptual clarity. They are not employed in the caselaw or the secondary literature. In part, that is because many courts, especially those in contextualist jurisdictions, do not carefully distinguish between the different categories of latent ambiguity. And even courts that do draw such a line sometimes conflate subject-matter and non-standard-meaning latent ambiguities. *See, e.g.*, *Mind & Motion Utah Invs., L.L.C. v. Celtic Bank Corp.*, 367 P.3d 994, 1004-05 (Utah 2016) (defining a latent ambiguity as an ambiguity that results

It is important to keep in mind that this basic framework is a considerable oversimplification of the caselaw. Both contextualism and textualism can be subdivided in various ways. And the law of contract interpretation is extraordinarily convoluted.⁴⁴ As a result, most states fall on a spectrum between pure textualism and pure contextualism, rather than firmly on one side or the other.⁴⁵

Like the courts, contracts scholars can also generally be split into textualist and contextualist camps, with a clear majority falling into the latter group. But commentators have also proposed positions that do not fit precisely into the textualist-contextualist continuum. For example, some believe that different interpretive approaches should be applied to different types of contracts, often distinguishing commercial agreements between businesses from consumer and employment agreements.⁴⁶

B. The Enforcement Costs Policy Debate

Judges and commentators have advanced a wide array of conceptual, theoretical, and empirical arguments in support of textualism and contextualism. But the debate has focused on three basic topics: (1) interpretive accuracy; (2) transaction costs; and (3) enforcement costs.⁴⁷ For example, on the issue of which approach results in more accurate interpretations, textualists assert that the express terms of a contract are the best evidence of contractual intent. This follows, in part, from their claim that extrinsic evidence is often unreliable, contradictory, and/or vague. Therefore, reducing the role of extrinsic evidence in the interpretive process heightens accuracy. Contextualists counter that meaning can only be determined by considering the context in which

when a contract is “applied or executed,” but then stating that a latent ambiguity can exist when evidence of “trade usage, course of dealing, or some other linguistic particularity” demonstrates that the terms of the contract “fail to reflect the parties’ intentions”).

Finally, as should be expected, the distinction between the two classes of latent ambiguity blurs on the margins. *In re Soper's Estate* is a case that probably could be placed into either category. See 264 N.W. 427, 428-29, 431-33 (Minn. 1935) (A contract provided that the benefits of an insurance policy were to be paid to the “wife” of one party if the party died; the party had previously deserted his wife, had pretended suicide, and was bigamously married to a second woman at the time the contract was executed; the court held that the party intended to make the second woman the beneficiary, even though legally the first woman was clearly his “wife.”).

44. As Professor Eric Posner described it, “[i]n virtually every jurisdiction, one finds irreconcilable cases, frequent changes in doctrine, confusion, and cries of despair.” Eric A. Posner, *The Parol Evidence Rule, the Plain Meaning Rule, and the Principles of Contract Interpretation*, 146 U. PA. L. REV. 533, 540 (1998).

45. Silverstein, *supra* note 12, at 258-60.

46. *Id.* at 261.

47. *Id.* at 262-63. As with Part II.A, this Subpart is an abbreviated version of the summary of the interpretation policy debate contained in Article One. See *id.* at 261-84. Once again, I have removed considerable detail and most citations to supporting authority.

language is used. Extrinsic evidence is thus essential to reaching the proper construction of an agreement.⁴⁸ The rest of this Subpart focuses on the debate over enforcement costs because that is the subject of the empirical studies in both Article One and this Article.

Textualist courts and scholars have regularly pressed the argument that litigation expenses are higher under contextualism. The claim has two components: Enforcement costs are greater in a contextualist regime because (1) there are more lawsuits, and (2) the lawsuits that are filed last longer.⁴⁹

Start by recalling that a much broader range of material is relevant in deciding whether a contract is ambiguous under contextualism. Textualism recognizes only patent ambiguities. Thus, when attempting to convince a textualist court that a contract is reasonably susceptible to more than one meaning, a party may rely solely upon the language within the four corners of the agreement. The judge is barred from considering any other evidence.⁵⁰ Contextualism recognizes both patent and latent ambiguities. Accordingly, a party appearing before a contextualist court may use the language of the agreement *as well as* the various types of extrinsic evidence in attempting to establish the existence of an ambiguity.⁵¹ Next, remember that textualists maintain that extrinsic evidence is frequently unreliable, contradictory, and/or vague.⁵² This means that contextualism both dramatically increases the *quantity* of relevant interpretive material that courts must consider at the ambiguity stage *and* reduces the *quality* of the material that goes into the ambiguity determination. These two features of contextualism raise enforcement costs from the textualist baseline through five pathways.⁵³

First, textualism incentivizes parties to write good contracts—contracts that contain few gaps and employ precise language. That is because in any post-execution dispute over the agreement's meaning, the

48. For more on the issue of accuracy, see *id.* at 263-68. For my discussion of transaction costs, see *id.* at 268-70; see also *id.* at 278-83 (setting forth additional policy arguments that do not fit squarely into the accuracy/transaction costs/enforcement costs framework).

49. *Id.* at 270. As used here, "last longer" denotes more than the mere passage of time. Rather, it means moving into later stages of the litigation process, with each stage requiring new activities that entail the expenditure of resources. Note also that the number of lawsuits filed and the length of those suits are only indirect measures of enforcement costs. Directly quantifying such costs would require analyzing party and court expenditures on items like attorney's fees, taxable costs, filing fees, and time spent by the judiciary addressing interpretation disputes. Nonetheless, there appears to be almost universal agreement that the number of actions brought and how long those actions last are sufficient proxies. *Id.* at 270 n.378.

50. See *supra* Part II.A.

51. See *supra* Part II.A.

52. See *supra* text accompanying note 48.

53. Silverstein, *supra* note 12, at 270-71.

judge will look no further than the four corners of the document at the first stage of the interpretive process. If the court finds the contract to be facially unambiguous, any understandings of the parties not expressly reduced to writing will be inoperative since the parties may not present extrinsic evidence to explain, supplement, or qualify a clear agreement. Contextualism has the opposite effect. It encourages parties to draft poor contracts—contracts with more open terms and ambiguities—because the parties know that should a dispute arise over construction, they can submit extrinsic evidence to address the issue. A badly written contract raises the likelihood of an interpretive disagreement that can result in a lawsuit. And it also increases the chances that the judge will find the contract to be ambiguous if a case is filed, requiring that the action proceed to stage two of the interpretation process. Accordingly, contextualism increases both the number of lawsuits that are commenced and the length of those proceedings in comparison to textualism.⁵⁴

Second, it is much more difficult for contextualist courts to decide contract interpretation cases on the pleadings. Since a party is entitled to argue that an agreement is ambiguous via extrinsic evidence, the court generally must permit discovery so that such evidence can be gathered. Therefore, the ambiguity determination typically can be made no earlier than at the summary judgment stage. Third, it is easier to establish that a contract is ambiguous when extrinsic evidence is available because the parties have more material out of which to craft reasonable constructions of the operative language. And contextualism motivates parties to invest heavily in the search for evidence that can support their preferred construction of the contract. Given the second and third points, lawsuits will usually last longer when courts employ contextualist methodology; more cases will reach discovery, summary judgment, and trial. In addition, the parties are more likely to file a lawsuit to begin with since those challenging the apparently clear terms of a contract stand a better chance of surviving the ambiguity stage and making it to a jury than if the courts use textualism.⁵⁵

Fourth, the quantity and quality of the extrinsic evidence available under contextualism make it more difficult to predict how judges will resolve the ambiguity question. Parties do not know which contractual language or other evidence the court is likely to find dispositive. And, if no lawsuit has been filed yet, neither party will even have access to all of the materials the judge is going to consider since discovery will not have started. Fifth, as noted in the previous paragraph, interpretation cases are

54. *Id.* at 269-74.

55. *Id.* at 271-72.

more likely to reach trial under contextualism than under textualism. Jury trials are considered notoriously difficult to predict. It is generally accepted that adjudicative uncertainty increases litigation. Therefore, the uncertainty contextualism creates at the ambiguity stage (pathway four) and through the greater number of trials (pathway five) increases the likelihood that parties will file a lawsuit. In addition, because uncertainty reduces the probability of settlement, contextualism tends to lengthen any interpretation litigation that is commenced.⁵⁶

Some contextualists disagree with the above analysis and contend instead that textualism has higher enforcement costs.⁵⁷ They offer the following arguments in defense of their position. First, because textualism prohibits the review of extrinsic evidence when determining whether an agreement is ambiguous, the principal inputs at stage one are (1) the contract, and (2) the judge. But judges have varying backgrounds and fields of experience. Such differences can lead them to reach disparate conclusions regarding the same contractual language. Indeed, one commentator contends that “[a]ppellate courts’ reviews of four corner determinations are often arbitrary and extremely subjective.”⁵⁸ Critically, the parties will not know which trial judge is going to interpret their contract until a lawsuit is filed. Nor will they know which appellate judges are going to be assigned to the case if the dispute subsequently reaches a higher court. This makes it immensely difficult for parties to predict the results of ambiguity decisions in textualist jurisdictions. Such uncertainty increases the number of lawsuits and hinders settlements.⁵⁹

Second, in many cases, extrinsic evidence can show that a contract that appears ambiguous on its face is actually perfectly clear. “[M]ost words have several meanings in the abstract (acontextually). With a [little] context, we may know easily which meaning is apt.”⁶⁰ As a result, contextualism may well decrease the number of lawsuits in which the court finds the contract to be ambiguous, reducing the length of these actions and promoting greater certainty.⁶¹

56. *Id.* at 272-74.

57. *Id.* at 276.

58. 6 PETER LINZER, CORBIN ON CONTRACTS § 25.14[B] at 163 (Joseph M. Perillo ed., rev. ed. 2010).

59. Silverstein, *supra* note 12, at 276.

60. BURTON, *supra* note 1, at 210.

61. Silverstein, *supra* note 12, at 277. In hindsight, I now think that this argument is clearly incorrect, at least as applied to textualism and contextualism in their pure forms. Let me explain. The argument presumes that the court is faced with a patently ambiguous agreement. Once a textualist court determines that a contract is ambiguous on its face at the pleading stage, the case proceeds to discovery and then motions for summary judgment, where all extrinsic evidence may be

Third, as noted above, textualism provides parties with an incentive to write longer, more complete contracts.⁶² Such agreements contain greater complexity, increasing the chance that terms will conflict or otherwise support varying interpretations. That, in turn, makes lawsuits concerning interpretive disputes more likely and raises the odds that the

considered. Contextualism (generally) skips the pleading stage (because there is no need to assess patent ambiguity up front), and goes straight to discovery and summary judgment, where again all extrinsic evidence may be considered.

Now, textualist courts describe summary judgment as being part of stage two—resolving the ambiguity—while contextualist courts describe summary judgment as being part of stage one—the ambiguity determination. This means that, technically, contextualist courts may find a smaller fraction of *facially* ambiguous agreements to be “ambiguous.” That is because when a contextualist court concludes a case at the summary judgment stage, the contract is described as being “unambiguous” even if the contract was patently ambiguous. A textualist court, by contrast, describes a grant of summary judgment when extrinsic evidence is considered to be a resolution of the patent ambiguity that was identified at the pleadings stage. *Compare* Morgan Creek Prods. v. Franchise Pictures LLC (*In re* Franchise Pictures LLC), 389 B.R. 131, 144–45 (Bankr. C.D. Cal. 2008) (applying California law, which follows contextualism, and explaining that when a court grants summary judgment in a contract interpretation dispute, it has concluded that the contract is “unambiguous”), *with* 3Com Corp. v. Banco Do Brasil, S.A., 171 F.3d 739, 743, 746–47 (2d Cir. 1999) (applying New York law, which follows textualism, and explaining that a “court may *resolve ambiguity* in contractual language as a matter ‘of law’ [upon a motion for summary judgment] if ‘the evidence presented about the parties’ intended meaning [is] so one-sided that no reasonable person could decide the contrary’” (emphasis added) (quoting *Boston Five Cents Sav. Bank v. Sec’y of Dep’t Hous. & Urban Dev.*, 768 F.2d 5, 8 (1st Cir. 1985))).

But summary judgment is summary judgment under both textualism and contextualism, regardless of how it is labeled for purposes of contract interpretation doctrine. In other words, under each approach, the courts are considering the same text and evidence in deciding the agreement’s meaning during summary judgment. Thus, when contextualists argue that their system reduces enforcement costs because a judge may use extrinsic evidence at the summary judgment stage to clear up the meaning of a patently ambiguous contract, they are not differentiating contextualism from textualism because the same process is followed under the latter system, albeit under a different label for purposes of *contract* law (“resolving the ambiguity”).

If there is a difference between the two approaches here that implicates enforcement costs, it is that contextualist judges (generally) do not spend time assessing whether a contract is patently ambiguous at the pleading stage before moving on to discovery, unlike their textualist counterparts. This means that contextualism probably does deal more efficiently with patently ambiguous agreements, reducing enforcement costs in cases involving that type of contract. But unless we know what percentage of contracts are patently ambiguous, the precise scope of these savings is unknown. And textualists can counter that their approach is much more efficient when a contract is *unambiguous* on its face because those cases may be disposed of at the pleadings stage under textualism, but must proceed to discovery and summary judgment under contextualism. (This is the second textualist pathway discussed above. *See supra* text accompanying note 55.)

Despite this analysis, I decided to present the second contextualist argument in the same way as I did in my prior article. *See* Silverstein, *supra* note 12, at 277. That is because (1) the argument is often presented in the literature; (2) I wanted to explain the weaknesses of this argument; and (3) when textualism and contextualism are *not* applied in their pure forms, the argument may have more force.

62. *See supra* text accompanying note 54.

judge will find the agreement to be ambiguous, lengthening any proceedings that are begun.⁶³

Fourth, the average person is often angered or even outraged when a counter-party insists on the strict application of unambiguous contractual language that appears to conflict with the prior contextual understanding of the parties. This is especially true when the counter-party stated during preliminary negotiations that the relevant language was of no consequence or would not be relied upon should conditions change or a dispute arise. Such conduct may infuriate a consumer or business sufficiently to motivate them to sue, or to resist to the point that the other side is compelled to file an action. If textualism incentivizes parties to stand on language that is inconsistent with the other side's reasonable expectations more than contextualism does—if textualism promotes behavior that increases the likelihood that contractual partners will become frustrated and accept going to court—then this may be another pathway through which textualism increases litigation.⁶⁴

Given all of these arguments, who is correct? Are more actions filed and do those actions last longer in contextualist jurisdictions? Or do textualist states suffer from higher levels of litigation? The question is one of empirical fact. Accordingly, the enforcement costs debate can be resolved only via empirical research.

III. THE WEST KEY NUMBER SYSTEM AS A DATA COLLECTION AND CODING DEVICE⁶⁵

Over the last two decades, empirical scholarship on law has become an increasingly common and important type of academic work.⁶⁶ However, empirical research poses numerous critical challenges,⁶⁷ making it considerably more difficult to complete than doctrinal and

63. Silverstein, *supra* note 12, at 277.

64. *Id.* at 277-78; cf. Roger W. Kirst, *Usage of Trade and Course of Dealing: Subversion of the UCC Theory*, 1977 U. ILL. L.F. 811, 870-71 (explaining that when a party switches from the flexible enforcement of its contracts to strict reliance on written terms, "unfairness may result . . . that upsets assumptions reasonably based on past practice").

65. As with Part II of this Article, this Part is a streamlined version of material set forth in Article One. See Silverstein, *supra* note 12, at 209-53 (containing Parts II and III of that piece).

66. Tracey E. George, *An Empirical Study of Empirical Legal Scholarship: The Top Law Schools*, 81 IND. L.J. 141, 151-60 (2006); Carolyn Shapiro, *Coding Complexity: Bringing Law to the Empirical Analysis of the Supreme Court*, 60 HASTINGS L.J. 477, 483-84, 488 (2009). See generally Symposium, *Empirical and Experimental Methods in Law*, 2002 U. ILL. L. REV. 789 (2002); Symposium, *The Empirical Revolution in Law*, 65 STAN. L. REV. 1195 (2013).

67. See George S. Geis, *Automating Contract Law*, 83 N.Y.U. L. REV. 450, 453-54 (2008); Michael Heise, *The Importance of Being Empirical*, 26 PEPP. L. REV. 807, 810-24 (1999).

theoretical scholarship. That helps to explain why law professors have produced so few empirical studies of contract interpretation.

The most important challenge of empirical work for my purposes here is that the process of collecting and coding empirical data is usually time-consuming and expensive.⁶⁸ To illustrate, consider projects that analyze legal materials obtained either from archives of tangible documents or from electronic databases. In such work, the authors or their research assistants typically must read and code every judicial opinion, contract, or other legal document gathered for the study. If the dataset is large, this can require exceptional levels of time and money.⁶⁹ For many empirical studies regarding law, data collection and coding will necessarily require such a resource-intensive approach. But in some circumstances, I believe that the West Key Number System can be used to dramatically streamline both aspects of the process, especially the coding of data.

The Key Number System is used to classify headnotes by legal subject.⁷⁰ Headnotes are descriptions of the points of law discussed in a judicial opinion.⁷¹ West attorneys write headnotes for all decisions that are published in its National Reporter System,⁷² and for selected unpublished cases.⁷³ Every headnote is assigned one or more key numbers.⁷⁴

The Key Number System contains over 400 topics, each of which is identified by its own topic number.⁷⁵ The topics are grouped into seven major categories: 1. Persons, 2. Property, 3. Contracts, 4. Torts, 5. Crimes, 6. Remedies, and 7. Government.⁷⁶ The topics are also divided into subtopics.⁷⁷ Each subtopic is assigned a unique key number.⁷⁸ “A particular point of law, then, is known by its . . . topic name [and number] and by its key number within that topic.”⁷⁹ There are

68. ROBERT M. LAWLESS ET AL., *EMPIRICAL METHODS IN LAW* 128 (2010) (observing that coding archival material “can be very time consuming”); George, *supra* note 66, at 151 (noting that data collection is “time-intensive”); Michael Heise, *The Past, Present, and Future of Empirical Legal Scholarship: Judicial Decision Making and the New Empiricism*, 2002 U. ILL. L. REV. 819, 829 (“Unfortunately, data gathering is frequently labor-intensive and time-consuming and, consequently, often quite expensive.” (footnote omitted)).

69. Silverstein, *supra* note 12, at 210-14 (setting forth several examples).

70. *Id.* at 216.

71. *Id.*

72. *Id.* at 217, 229.

73. *Id.* at 229 n.149.

74. *Id.* at 217.

75. *Id.* at 216-17.

76. *Id.* at 217.

77. *Id.*

78. *Id.*

79. Fritz Snyder, *The West Digest System: The Ninth Circuit and the Montana Supreme*

over 100,000 distinct key numbers and, as a group, they are intended to cover every legal subject that could conceivably be addressed in an American civil or criminal action.⁸⁰

Sometimes a researcher can exploit data that a third party has already gathered and coded.⁸¹ Using such data in empirical work is called “secondary data-analysis.”⁸² This type of analysis saves time and money because “the hard work of recording the data has already been done.”⁸³ The West Key Number System is essentially a scheme for coding American caselaw.⁸⁴ When West’s staff classifies the headnotes in an opinion with particular key numbers, they are *coding* the decision by identifying the precise legal issues discussed by the court. This means that the universe of cases containing headnote and key number treatment is an immense, coded database ripe for mining through secondary data-analysis.⁸⁵ By crafting search queries on Westlaw,⁸⁶ a researcher can expeditiously accumulate a massive array of data coded by West’s trained professionals, saving the author considerable time and money.

However, using the Key Number System for data collection and coding raises numerous methodological issues. In Article One, I explained in detail the strengths and weaknesses of employing key numbers for empirical research.⁸⁷ Several points from that discussion are worth reiterating here.

By far the greatest strength of the Key Number System is the resources it saves. When an author uses key numbers for data collection and coding, there is no need to individually analyze the relevant judicial opinions. That is because West’s attorney-editors have already completed all or most of the required coding.⁸⁸ Other advantages include the following. First, key numbers are assigned to cases by independent parties (i.e., West’s staff) who have no relationship with the researcher or any research hypothesis. This eliminates author bias from the coding process.⁸⁹ Second, the considerable training West’s attorneys receive in

Court, 60 MONT. L. REV. 541, 542-43 (1999).

80. Silverstein, *supra* note 12, at 217.

81. LAWLESS ET AL., *supra* note 68, at 128.

82. *Id.* at 129 (emphasis omitted).

83. *Id.* at 130.

84. Silverstein, *supra* note 12, at 220; accord Ian Gallacher, *Mapping the Social Life of the Law: An Alternative Approach to Legal Research*, 36 INT’L J. LEGAL INFO. 1, 16-18 (2008) (explaining that headnotes “are coded according to the master list” of topics and key numbers (emphasis added)).

85. Silverstein, *supra* note 12, at 220 & n.99.

86. WESTLAW, <http://www.westlaw.com> (last visited Apr. 22, 2019).

87. See Silverstein, *supra* note 12, at 226-53.

88. *Id.* at 226.

89. *Id.* at 227.

classifying headnotes with key numbers makes them more accurate and consistent coders than student research assistants, and perhaps even than many authors.⁹⁰ Third, West's staff follows careful protocols in assigning key numbers to headnotes.⁹¹ And fourth, empirical studies conducted via the Key Number System are easy to analyze and replicate.⁹²

These benefits must be balanced against several problems with using key numbers in empirical scholarship. The signature limitation is that generally only published decisions receive key number classifications. Such opinions are a tiny subset of the broader populations that researchers typically wish to study, such as lawsuits, disputes, accidents, and contracts. And there is compelling evidence that reported cases are not a representative sample of the larger categories. This introduces critical selection bias into datasets created using the Key Number System, undercutting the generalizability of any project findings.⁹³ But this weakness does not justify abandoning key number studies. Social science is valuable even when it is not perfect, and numerous, well-regarded empirical studies on law suffer from selection bias.⁹⁴

The most important of the remaining weaknesses are as follows. First, West is not always accurate or consistent in its coding work.⁹⁵ Second, judicial opinions that receive key numbers frequently suffer from what I call "over-coding": Key numbers are sometimes included in a case even though the subject associated with the key number was not actually litigated. This typically happens when a topic is only discussed in passing by the court.⁹⁶ Third, there is considerable overlap between many of the key number topics and subtopics. That creates room for judgment when West's staff is making classification decisions. As a result, there are countless cases with headnotes that could have been classified using one key number, but which were instead classified with a different, related key number—either from within the same topic or from a completely separate topic. In Article One, I described this problem as "under-coding."⁹⁷ Fourth, some of the key number topics and

90. *Id.*

91. *Id.* at 228.

92. *Id.* For two additional advantages, see *id.* at 228-29.

93. *Id.* at 229-41.

94. *Id.* at 241-46.

95. *Id.* at 246-47 (describing accuracy and consistency as two separate problems).

96. *Id.* at 247-48.

97. *Id.* at 248-49. Note also that sometimes a case involving a particular legal subject lacks any key numbers related to that subject. See, e.g., *Braund, Inc. v. White*, 486 P.2d 50, 50, 55-56 (Alaska 1971) (involving application of the parol evidence rule under the Uniform Commercial

subtopics suffer from “overbreadth.” In other words, they cover multiple, distinct legal subjects.⁹⁸ Each of these four problems can distort the results of Westlaw searches that are used to measure the prevalence of a type of litigation. Fifth, the Key Number System is not used to code for numerous elements of judicial opinions. When a headnote is classified with a given key number, all this conveys is that a particular legal issue was discussed by the court. Critically, many empirical studies of caselaw concern features that go beyond the subject matter of the litigation.⁹⁹ Sixth, Westlaw caps the number of characters (including spaces) that may be included in a search of its database at 600. That restriction will prevent scholars from using the Key Number System for empirical studies that necessitate including a very large group of key numbers in a single search.¹⁰⁰

As the last four paragraphs imply, whether a key number protocol is suitable for a particular project will depend on a variety of theoretical and practical factors. For example, key number studies can employ much larger datasets than many other types of empirical work because the researcher need not spend time reading the cases that make up the dataset. But key number classifications only capture a narrow range of information about judicial opinions and may lack the necessary level of precision due to over-coding, overbreadth, and under-coding. By comparison, carefully reading cases or similar materials enables a scholar to gather richer data and can address many precision concerns. But completing such work requires the expenditure of considerably more resources and typically entails using a much smaller sample size. In deciding between a key number study and an alternative methodology, scholars must consider these types of trade-offs.

IV. PRIOR EMPIRICAL STUDY OF THE IMPACT OF THE TEXTUALIST AND CONTEXTUALIST APPROACHES ON ENFORCEMENT COSTS

Recall the policy issue my study in Article One was designed to address. Textualists contend that enforcement costs are lower under their approach to contract interpretation than under contextualism.¹⁰¹ Contextualists counter that their system best minimizes litigation

Code (“UCC”), but not tagged with any key numbers concerning contracts, sales, or evidence; headnotes were only classified with procedure-related key numbers, namely Appeal and Error (topic 30) and Judgment (topic 228)).

98. Silverstein, *supra* note 12, at 250.

99. *Id.* at 251-52.

100. *Id.* at 252. For three other weaknesses, see *id.* at 249-51.

101. *Id.* at 284.

expenses.¹⁰² There are two basic components to enforcement costs: (1) the number of lawsuits filed, and (2) how long those lawsuits last. Each side maintains that it is superior on both elements; each asserts that fewer actions are commenced and that those actions end more quickly under its approach, reducing total enforcement costs.¹⁰³

Accordingly, there are two hypotheses that merit empirical testing: the textualist hypothesis and the contextualist counter-hypothesis. For each, the causal or independent variable is the school of interpretation employed by the courts and the dependent variables are the quantity of lawsuits filed and the length of those actions. The null hypothesis is that there is no difference between textualism and contextualism in their impacts on the number of contract interpretation lawsuits commenced and how long those cases last.

To conduct the original study, I began by identifying ten states where the caselaw appeared sufficiently clear to support including the jurisdiction rather firmly in either the textualist or contextualist camp.¹⁰⁴ I sought five states for each category.¹⁰⁵ And the ultimate classifications were based upon my own review of the doctrine in each jurisdiction.¹⁰⁶ The textualist group contained Indiana, Minnesota, Missouri, New York and Texas.¹⁰⁷ The contextualist group contained Arizona, California, Colorado, New Jersey, and Washington.¹⁰⁸

I turned next to the selection of key numbers for my Westlaw searches. There are thirty-three topics that fall under the general category of “Contracts,”¹⁰⁹ and many of these topics contain key numbers that relate to interpretation. Examples include Sales, Insurance, Compromise and Settlement, and Release.¹¹⁰ In addition, numerous topics classified under the other categories—Persons, Property, Torts, Remedies, and Government—implicate contracts.¹¹¹ To illustrate, issues relating to damages for breach of contract are coded almost exclusively under the Damages topic, which is contained in the Remedies

102. *Id.*

103. *Id.* at 284-85.

104. *Id.* at 286.

105. *Id.*

106. *Id.*

107. *Id.* at 286 tbl.2.

108. *Id.* at 286 & tbl.2. (also discussing two additional standards I employed in the state selection process: (1) each state needed to have an intermediate appellate court, and (2) the two groups of states had to be of roughly comparable size in terms of population).

109. THOMSON REUTERS, WEST’S ANALYSIS OF AMERICAN LAW, at XI (2017) [hereinafter WEST’S ANALYSIS OF AMERICAN LAW].

110. *Id.* at 293 (Compromise and Settlement); *id.* at 977-78 (Insurance); *id.* at 1540-41 (Release); *id.* at 1558 (Sales).

111. *See id.* at IX to XIV.

category.¹¹² Principally because this was my first attempt at using the Key Number System as a coding device, I decided to focus on the core key numbers relating to contracts, contract interpretation, and the parol evidence rule, rather than construct a dataset using all potentially relevant key numbers.

The label “Contracts” is used both for the third general category and for a distinct topic—“95. Contracts.”¹¹³ I concentrated on that topic and on “157. Evidence,” which falls under the Remedies category,¹¹⁴ since one section of the Evidence key numbers concerns both the parol evidence rule and the use of extrinsic evidence in the construction of contracts and other writings.¹¹⁵ I incorporated the key numbers that govern the parol evidence rule because of that rule’s extremely close relationship to contract interpretation. All other topics and subtopics were excluded from the study.¹¹⁶

I then analyzed the various interpretation and parol evidence rule key numbers under topics 95 (Contracts) and 157 (Evidence) to identify precisely which key numbers should be used in my ultimate searches.¹¹⁷ After completing this, I organized the selected key numbers into three groups: (1) contract interpretation key numbers from the Contracts topic, (2) contract interpretation key numbers from the Evidence topic, and (3) parol evidence rule key numbers from the Evidence topic.¹¹⁸ Using these groups, I constructed three search queries for each state.¹¹⁹ The first query contained only the key numbers in group (1). The second contained the key numbers in groups (1) and (2). And the third contained the key numbers in all three groups—(1), (2), and (3).¹²⁰ The three queries were run in both the relevant state database and the relevant mixed state/federal database, so there were actually six searches in total for each jurisdiction.¹²¹ The results of the six searches served as proxies for the level of contract *interpretation* litigation in each state during the time period of the study—the ten-year period from January 1, 2000, through December 31, 2009.¹²²

112. *Id.* at XII, 568-76.

113. *Id.* at XI, XV.

114. *Id.* at XII, XVI.

115. *Id.* at 715-19 (“XI. Parol or Extrinsic Evidence Affecting Writings.”).

116. Silverstein, *supra* note 12, at 287.

117. *Id.* at 288.

118. *Id.*

119. *Id.*

120. *Id.*

121. *Id.*

122. *Id.* at 288, 294.

At this juncture, there was still one piece missing. I could not simply compare the search results from the textualist states to those from the contextualist states. That is because there are far too many differences between the ten jurisdictions included in my study to make such a comparison fruitful—differences in population, business activity, the number of contracts executed per person, litigation culture, rules of procedures, opinion publishing practices, and countless others. Therefore, I needed to add something to the study that attempts to control for the differences among the ten states.¹²³

The control I decided to employ was a search in every relevant Westlaw database for all cases that use *any* key number from the Contracts topic (topic 95).¹²⁴ This search served as a proxy for the total level of *contract* litigation in each state during the study time period.¹²⁵ With the addition of this query, I could compare the cases coded for contract interpretation to the cases coded as contract disputes generally. If textualism and contextualism—in relation to each other—do not impact how many lawsuits are filed or how long those lawsuits last, then one might reasonably expect the ratio of contract interpretation cases to general contract cases to be roughly the same in textualist and contextualist states. Put another way, if the ratio of cases returned by my three queries to the cases returned by the control search is constant for textualist and contextualist states, then the null hypothesis cannot be rejected. Alternatively, if the fraction of contracts cases that are interpretation cases is higher in contextualist jurisdictions by a statistically significant amount, this suggests that (i) parties file more interpretation lawsuits in contextualist states, (ii) the interpretation lawsuits in those states last longer, as demonstrated by the fact that more reach the appellate level or otherwise result in a reported decision, or (iii) some combination of the two. And the reverse is true if the fraction is higher in textualist states by a statistically significant level.¹²⁶

I chose cases classified with a key number from topic 95 as the control for three reasons. First, I wanted the study to rely as much as possible on key number searches. Second, a control that focuses on reported decisions reduces the likelihood that any differences in opinion publishing practices across state lines will bias my results. That is because such differences should apply equally to contract interpretation cases and general contract cases. Third, numerous other factors that vary among the states in my study—such as population, contracts executed

123. *Id.* at 289.

124. *Id.*

125. *Id.*

126. *Id.* at 289-90.

per person, and rules of procedure—probably impact the levels of contract interpretation litigation and general contract litigation in many of the same ways. Thus, comparing interpretation cases specifically to contract cases generally should control for a large number of differences between the relevant states.¹²⁷ Of course, the control is far from perfect (as discussed more below). Nonetheless, I think it is the best candidate given the purposes of this project.¹²⁸

There were five additional concerns with my initial study,¹²⁹ but only three are worth reviewing here. First, under-coding may have

127. Some elaboration is in order. The control was selected in part for its ability to address both confounding variables and what I will describe as “measurement problems.” A confounding variable is “a variable omitted from a study but that does affect the phenomenon under investigation thereby potentially leading to a false positive result.” LAWLESS ET AL., *supra* note 68, at 406. In the context of my project, confounding variables are causal forces—*other than* whether the state employs textualism or contextualism—that impact the level of contract interpretation litigation in a given state. Examples include the population of the jurisdiction, the scope of business activity, rules of procedure, and litigation culture. To properly assess any causal relationship between interpretive approach (the independent variable) and the quantity of interpretation litigation (the dependent variable), the study protocol must “control” for such confounding variables. *See id.* at 30-32. Failing to do so undermines the “internal validity” of the study. Avani Mehta Sood, *Applying Empirical Psychology to Inform Courtroom Adjudication—Potential Contributions and Challenges*, 130 HARV. L. REV. F. 301, 309 (2017) (“The internal validity of a study—the extent to which a variable of interest can be said to cause an observed effect—depends on tightly controlling for confounding factors that could otherwise be driving the effect.”). The primary purpose behind the control searches was to control for confounding variables. *See supra* text accompanying notes 123-27; *infra* text accompanying notes 127-28. Indeed, that is why I call them “control searches.”

Confounding variables must be distinguished from measurement problems. The latter are problems associated with measuring the level of a type of litigation by relying exclusively on the key number coding of judicial opinions in a given Westlaw database. Examples include (1) over-coding, (2) overbreadth, (3) under-coding, and (4) the problem of foreign law. *See supra* text accompanying notes 96-98. To illustrate using my study, the Westlaw searches for interpretation decisions returned some cases that did not actually concern contract interpretation because of the problems of over-coding and overbreadth. *See infra* text accompanying notes 133-35. Likewise, the queries also returned some opinions that involved the law of the wrong jurisdiction. *See infra* notes 136-39 and accompanying text.

Critically, my control searches likely controlled for certain measurement problems in much the same way they controlled for confounding variables. To illustrate, if state A’s courts write longer opinions that focus more on background principles than state B’s courts, then there will generally be more over-coding in state A than in state B. *See Silverstein, supra* note 12, at 248. But to the extent such variations in opinion drafting practices exist, they likely apply to both interpretation cases and other types of contract cases. If that is so, then my control search filtered out any mismeasurement bias created by over-coding. That is because my study centered on comparing the ratio of interpretation cases to contract cases in textualist states with the ratio in contextualist states. *See supra* text accompanying notes 124-26; Silverstein, *supra* note 12, at 289-91, 295 tbl.3, 296 tbl.4, 297. If interpretation cases and other contract cases suffer from comparable degrees of over-coding in a given state, then both the numerator and the denominator will increase by the same percentage, leaving the ratio of interpretation opinions to contract opinions unchanged in that jurisdiction despite the over-coding.

128. Silverstein, *supra* note 12, at 290-91.

129. *Id.* at 291-94.

impacted my study results because I (1) used only interpretation and parol evidence rule key numbers in topics 95 (Contracts) and 157 (Evidence) to gather interpretation decisions, and (2) used only topic 95 to gather contract decisions.¹³⁰ Accordingly, I excluded numerous cases that involve interpretation specifically or contracts generally. The precise impact of the under-coding is unclear.¹³¹ Indeed, one of the purposes of the current Article is to conduct a broader study that addresses this under-coding concern.¹³²

Second, my key number searches retrieved a considerable number of cases for the interpretation datasets that did not actually involve contract construction.¹³³ The searches did so for two reasons. First, a number of decisions were retrieved because of over-coding: West's staff added the pertinent interpretation key numbers to the opinions even though the legal subjects associated with those key numbers were not litigated; they were merely discussed by the courts. Second, additional cases were included because of the problem of overbreadth: several of the interpretation key numbers I used in the searches concern the construction of both contracts and other legal documents. Thus, some of the opinions pulled for the datasets focused on the interpretation of alternative types of writings, such as wills. I ran various tests to determine the levels of over-coding and overbreadth. While the tests did not yield identical results, the outcome of the most comprehensive test suggests that over-coding and overbreadth probably impacted my *interpretation* datasets in substantially the same ways.¹³⁴ Nonetheless, given the inconsistency in my test findings, it is possible that over-coding and overbreadth distorted my results by affecting one group of states more than the other.¹³⁵

Third, my study addressed how a jurisdiction's approach to construing contracts impacts the level of interpretation litigation in that territory.¹³⁶ But courts located in one state often apply the law of another state or federal law, and my queries did not filter out such cases. Therefore, it is possible that the search results were corrupted by opinions applying foreign law. As with the problems of over-coding and overbreadth, I used a variety of techniques to test for the incidence of foreign law decisions in the interpretation datasets. These tests support

130. *Id.* at 291.

131. *Id.* at 292.

132. *See infra* Part V.B.

133. Silverstein, *supra* note 12, at 292.

134. *Id.* at 292-93.

135. *Id.* at 293. For details regarding the most comprehensive test I ran, see *id.* at 293 n.475.

136. *Id.* at 293.

two conclusions. First, virtually every *interpretation* case retrieved by my searches that concerns foreign law was filed in federal court.¹³⁷ This means that the study findings based solely on state court decisions were almost certainly not biased by the incidence of foreign law authorities in the interpretation datasets. Second, there were substantially more federal cases applying foreign law in the contextualist states than in the textualist states.¹³⁸ Foreign law opinions may thus have biased the study results derived from searches for a combination of state *and* federal interpretation decisions.¹³⁹

Before turning to the results of the study, it is worth reiterating that I relied solely on the Key Number System for the data coding in this project. I did not exclude from or include in the dataset a single case based on my own analysis of the opinion. To construct my coded dataset of 8113 cases, I simply identified the correct Westlaw search queries. Employing the West Key Number System in this manner dramatically sped up my work and made the cost of the study negligible.¹⁴⁰

The six Westlaw searches I ran for each state returned data that I organized into twelve distinct comparisons of the litigation levels in the textualist and contextualist groups.¹⁴¹ My statisticians then ran *t*-tests on each of the twelve comparisons and logistic regressions on two, leading to a total of fourteen measures. The two logistic regressions found no statistically significant difference between the contextualist and textualist jurisdictions. And the *t*-tests also found no statistically significant difference for eleven of twelve measures. On the twelfth measure, there was a higher level of litigation in *textualist* states that was statistically significant at the .05 level. But since eleven of twelve *t*-tests and both logistic regressions failed to find a statistically significant difference, the ultimate conclusion of this study was that the null hypothesis could not be rejected: The study could not reject the hypothesis that there is no difference between textualism and

137. *Id.*

138. *Id.*

139. *Id.* Let me highlight again that the tests for over-coding, overbreadth, and foreign law that I ran while writing Article One only concerned the *interpretation* datasets, not the *control* datasets. While working on the current piece, I ran some additional tests for bias in the control groups from my original study, focusing on the problem of foreign law cases. The results of that testing are mixed. On the one hand, decisions containing markers that they concerned foreign law did not appear with equal incidence in the contextualist and textualist control datasets. On the other hand, to some degree, this difference balanced out the variation between the textualist and contextualist *interpretation* datasets, limiting the biasing effect of foreign law cases. The precise searches I ran to conduct the tests and the results of the tests are on file with the Author.

140. *Id.* at 208-09, 294.

141. *Id.* at 295 tbl.3, 296 tbl.4, 297-98, 298 tbl.5.

contextualism in their impacts on the number of contract interpretation lawsuits filed and the length of those proceedings.¹⁴²

After setting forth these results in Article One, I discussed several potential explanations for the study findings.¹⁴³ I began with methodological problems—grounds upon which one could challenge the validity of the study structure and thus the ultimate conclusions.¹⁴⁴ First, recall the many limitations identified above regarding the use of key numbers for data collection and coding, such as selection bias, under-coding, and over-coding.¹⁴⁵ Those are all important weaknesses with my protocol.¹⁴⁶ Second, because the contract interpretation caselaw is extremely convoluted, most states are not purely textualist or contextualist. They instead fall somewhere along the continuum between the two extremes.¹⁴⁷ Accordingly, the states I chose for the study might be too similar in their interpretive practices for any differences between textualism and contextualism to show up in the results.¹⁴⁸ Third, my control query—a search for all cases using a topic 95 (Contracts) key number—likely controlled for numerous differences between the jurisdictions in the study.¹⁴⁹ But the query could *not* control for variations in contract law *beyond the subfield of interpretation*—variations that could impact the level of general contract litigation in each state.¹⁵⁰ Differences in general contract doctrine across jurisdictions thus might have corrupted my study findings by distorting the results of the control searches.¹⁵¹ Fourth, views about the law can influence human behavior in ways that make it difficult to empirically measure the impacts of contrasting legal standards.¹⁵² For example, suppose that sophisticated parties believe that enforcement costs are lower under textualism than under contextualism. These parties might employ techniques (such as choice-of-law and choice-of-forum clauses) that increase the probability that textualist rules will govern their contracts—especially the contracts that are more likely to result in an interpretive dispute. That would mean that a disproportionate amount of

142. *Id.* at 298-300, app. 2 at 317-24.

143. *See id.* at 300-07.

144. *See id.* at 300-05.

145. *See supra* notes 93-100, 123-39 and accompanying text.

146. Silverstein, *supra* note 12, at 300.

147. *Id.* at 301; *see also supra* notes 44-45 and accompanying discussion.

148. Silverstein, *supra* note 12, at 301.

149. *Id.* at 302-03.

150. *Id.* at 303.

151. *Id.*; *see also infra* notes 295-302 and accompanying text (discussing this problem in detail in the context of Study Four).

152. Silverstein, *supra* note 12, at 303.

interpretation litigation is commenced in textualist territories, complicating any efforts to accurately compare enforcement costs under the two interpretive approaches. If contracting persons are in fact changing their behavior because of their *beliefs* about the impacts of the caselaw, then it may be extremely difficult or even impossible to measure the *actual* impacts of textualism and contextualism.¹⁵³

I also examined the possibility that I did not find a statistically significant difference in the level of enforcement costs between textualism and contextualism because such costs are in fact substantially the same under the two systems.¹⁵⁴ I set forth three potential explanations for why this might be the case. First, perhaps all of the enforcement cost arguments pressed by textualists and contextualists¹⁵⁵ are false.¹⁵⁶ If that is so, then switching between approaches likely has no real impact on the number of interpretation actions brought and the length of those proceedings.¹⁵⁷ Second, maybe the various enforcement cost arguments of each side are largely true, but the overall effects of the two systems essentially cancel out.¹⁵⁸ In other words, when all of the possible pathways to increased (or reduced) litigation levels under one approach are combined together and weighed against those of the other approach, the countervailing forces largely offset.¹⁵⁹ A third possibility is that the countless other factors that influence whether a lawsuit is filed and how long it lasts—such as rules of procedure and the precise relationship of the parties—swamp any effect resulting from the interpretive system in use by the courts.¹⁶⁰ This would mean that even if the choice between textualism and contextualism matters to some degree, the impacts are too trivial to be measurable.¹⁶¹

V. PROPOSED ADDITIONAL STUDIES

The study I completed for Article One—which I shall refer to as “Study One”—is merely one project concerning an intricate topic. It is generally improper to reach definitive conclusions about complicated empirical questions based on a single experiment, even when the

153. *Id.* at 303-04.

154. *See id.* at 305-07.

155. *See supra* Part II.B.

156. Silverstein, *supra* note 12, at 305.

157. *Id.*

158. *Id.* at 306.

159. *Id.*

160. *Id.* at 307.

161. *Id.*

research protocol used is largely free of methodological limitations.¹⁶² And as explained in Parts III and IV,¹⁶³ the protocol I employed in Study One has considerable methodological weaknesses. This means that the findings set forth in my first piece are far from the last word on the issue of contract interpretation enforcement costs.

Accordingly, in the conclusion to my initial paper, I proposed four additional key number studies¹⁶⁴ that might shed further light on the question of which school of contract construction best reduces the number and length of interpretation lawsuits.¹⁶⁵ This Part outlines those projects (referred to as Studies Two, Three, Four, and Five) and explains why only one of them proved feasible.

The proposed additional studies, as a group, have three broad purposes: first, to generate additional evidence regarding the debate over interpretation enforcement costs; second, to offer further guidance on how to employ the Key Number System for data collection and coding; and third, to provide insights regarding empirical research on law generally. Given these purposes—and particularly the latter two—even the projects that I did not complete warrant analysis here.

Note that my discussion of Studies Two through Five in this Part is generally limited to (1) issues that I did not examine in Article One or in earlier sections of this Article, and (2) previously addressed issues that apply in a different way to the new projects. Let me explain why I chose this approach. Each study presented below is centered on the Key Number System. Thus, the general strengths and weaknesses of that system as a tool for empirical work apply to Studies Two through Five in essentially the same ways that they apply to Study One.¹⁶⁶ In addition, all of the new projects employ a structure that is similar to my initial study—a comparison of the ratio of interpretation cases to general contract cases in textualist and contextualist jurisdictions. Accordingly, many of the specific advantages and disadvantages of the Study One

162. LAWLESS ET AL., *supra* note 68, at 47 (“Finally, it follows from all of this that no individual study will be dispositive of a given research question. It is important that research results be replicated.” (footnote omitted)); Pauline T. Kim, *Bargaining with Imperfect Information: A Study of Worker Perceptions of Legal Protection in an At-Will World*, 83 CORNELL L. REV. 105, 155 (1997) (“Of course, a single study cannot definitely resolve difficult and disputed questions, even empirical ones.”).

163. See *supra* Parts III–IV.

164. Silverstein, *supra* note 12, at 308–10.

165. Silverstein, *supra* note 12, at 308; see also LAWLESS ET AL., *supra* note 68, at 47 (“In addition, exploring a problem from a number of different angles and using several different methods is more useful and informative than is using a single method. Using a variety of approaches allows the studies, in combination, to balance out their respective limitations.” (footnote omitted)).

166. See *supra* notes 88–100 and accompanying text; Silverstein, *supra* note 12, at 226–53.

protocol also apply to the new projects.¹⁶⁷ As a result, there is little reason to review either (a) the general strengths and weaknesses of the Key Number System, or (b) the specific advantages and disadvantages of the Study One structure, *unless* these points apply in new ways with respect to one or more of the proposed studies.

A. Study Two: More States

Study One involved only ten states—five textualist and five contextualist.¹⁶⁸ In addition, the states were not selected randomly.¹⁶⁹ It is thus possible that the territories I used to construct my dataset are not representative of all American jurisdictions.¹⁷⁰ At the end of Article One, I outlined a study using a larger number of states that could partly correct for this weakness¹⁷¹—Study Two. This project involves (1) running the Westlaw searches from my first project in additional territories beyond the initial ten, (2) combining the results of these searches with those from Study One, and (3) statistically analyzing the expanded dataset.

Study Two looked daunting from the start. Recall that the contract interpretation caselaw is exceptionally convoluted.¹⁷² As a result, in Study One, it was quite difficult to identify ten states where the doctrine appeared sufficiently clear to justify including the jurisdictions firmly in either the textualist or contextualist camp.¹⁷³ Furthermore, the ten states I chose for the project were among the easiest to categorize. Identifying additional territories was thus going to be more challenging than the selection process for Article One. In other words, Study Two is more difficult to complete than Study One. Remember also that my classification decisions with respect to the original ten states are not immune from criticism.¹⁷⁴ But as I just noted, the jurisdictions from my original study were part of the set that was easiest to label. Accordingly, any classification decisions involving new states will likely be more vulnerable to challenge. And therefore the results from Study Two might be less valid than those from Study One, even though the new project involves a larger number of territories.

167. See *supra* notes 104-53 and accompanying text; Silverstein, *supra* note 12, at 286-94, 300-05.

168. Silverstein, *supra* note 12, at 286.

169. *Id.* app. 2 at 317.

170. *Id.* app. 2 at 317-18.

171. See *id.* at 308-09.

172. See *supra* notes 44-45 and accompanying text; Silverstein, *supra* note 12, at 259-60.

173. See Silverstein, *supra* note 12, at 301.

174. See *supra* notes 147-48 and accompanying text; Silverstein, *supra* note 12, at 301.

Despite these concerns, I spent considerable time analyzing the caselaw in an attempt to expand my groups of textualist and contextualist states. Based on this research, I identified several additional jurisdictions that seem to fall squarely in the textualist camp. But I was unable to locate any other contextualist states that meet the parameters of my study. Expanding only the textualist set has little research value. Accordingly, I determined that Study Two is not feasible.

To elaborate, my research uncovered only three states beyond the original five that can fairly be characterized as strongly contextualist: Alaska, New Mexico, and Vermont. In Study One, I restricted the eligible territories to those with an intermediate appellate court.¹⁷⁵ And I chose to employ that requirement again in this Article, thereby requiring the elimination of Vermont from consideration.¹⁷⁶ I also believe that New Mexico and especially Alaska are too small in terms of total population to constitute appropriate fits for the study.¹⁷⁷ But even if I thought differently with respect to those two states, increasing the contextualist group from five jurisdictions to seven is not a sufficient expansion from my original project to justify completing Study Two.

Note that if I conducted a more extensive review of the caselaw, it is possible that I would find enough new contextualist states to warrant finishing Study Two. But the value of this project does not justify the level of work that would be required to complete the more thorough review, particularly given the real likelihood that even truly comprehensive research would fail to uncover a sufficient number of additional contextualist states.

B. Study Three: More Key Numbers

The next proposed study uses the same methodology employed in Article One,¹⁷⁸ but includes far more key numbers in both the interpretation and control searches. The purpose of using such queries in the data-gathering process is to eliminate—or at least minimize—the effect of under-coding.¹⁷⁹

175. See Silverstein, *supra* note 12, at 286 & n.443.

176. Vermont does not have an intermediate appellate court. See THE BLUEBOOK: A UNIFORM SYSTEM OF CITATION 298 tbl.T.1 (Columbia Law Review Ass'n et al. eds., 20th ed. 2015).

177. For the population of these two states, see *US States – Ranked by Population 2019*, WORLD POPULATION REV., <http://worldpopulationreview.com/states> (last visited Apr. 22, 2019).

178. See Silverstein, *supra* note 12, at 286-94.

179. For an explanation of under-coding, see *supra* notes 96-97 and accompanying text; Silverstein, *supra* note 12, at 248-49.

In Study One, the searches for interpretation decisions contained only key numbers in topics 95 (Contracts) and 157 (Evidence).¹⁸⁰ But there are numerous key numbers relating to the construction of agreements in other topics, including Customs and Usages (topic 113),¹⁸¹ Insurance (topic 217),¹⁸² Release (topic 331),¹⁸³ and Vendor and Purchaser (topic 400).¹⁸⁴ Likewise, my control search sought all cases tagged with any key number in classification 95.¹⁸⁵ However, there are multiple other topics with key numbers concerning contracts. This group consists of classifications that focus on contract law exclusively, such as Release (topic 331)¹⁸⁶ and Guaranty (topic 195),¹⁸⁷ and topics that address both contracts and other fields, such as Insurance (topic 217)¹⁸⁸ and Damages (topic 115).¹⁸⁹ Because the interpretation and control searches in Study One left out so many relevant key numbers, the searches failed to gather a substantial number of interpretation and contract opinions that otherwise met the parameters of my study. Therefore, under-coding may have biased the results.¹⁹⁰

Unlike with over-coding, overbreadth, and foreign law, there is no effective technique available to test for the impact of under-coding. Over-coding, overbreadth, and foreign law are problems that infect the cases *within* a given dataset. Once the dataset is gathered, it is possible to review the contents for opinions that contain markers indicating that they (1) were included as a result of over-coding or overbreadth, or (2) involve the law of another jurisdiction. Such a review can be done manually by reading all or a sample of the collected decisions, or via Westlaw searches for terms within the dataset opinions that suggest the

180. Silverstein, *supra* note 12, at 287.

181. WEST'S ANALYSIS OF AMERICAN LAW, *supra* note 109, at 562-63 (most of the key numbers from 113k9 through 113k17 concern interpretation).

182. *Id.* at 977-78 (every key number in topic 217, section XIII.G, which is 217k1805 to 217k1863, concerns interpretation).

183. *Id.* at 1540-41 (most of the key numbers in topic 331, section II, which is 331k25 to 331k40, concern interpretation).

184. *Id.* at 1812 (many of the key numbers in topic 400, section II, which is 400k46 to 400k81, concern interpretation).

185. Silverstein, *supra* note 12, at 289.

186. WEST'S ANALYSIS OF AMERICAN LAW, *supra* note 109, at 1539-41.

187. *Id.* at 847-49.

188. *Id.* at 963-1006. In particular, see *id.* at 976-80, which contains section XIII, "Contracts and Policies."

189. *Id.* at 568-76 (out of the roughly 500 key numbers contained in the Damages topic, at least seventy concern contract law).

190. For an example of the potential impact of under-coding on Study One, see Silverstein, *supra* note 12, at 291-92, 291 n.471. This example is also discussed *infra* in the text accompanying notes 280-82.

existence of one of the three problems.¹⁹¹ Under-coding is different. By its very nature, under-coding concerns cases that were *not* obtained via the Westlaw queries used to compile the dataset. As a result, there is nothing to review, manually or otherwise.¹⁹²

The only way to address under-coding is by crafting operative Westlaw searches that include more or all of the key numbers relevant to a research subject. The plan for Study Three was to do precisely that. My goal was to construct (a) an interpretation query that uses all or virtually all of the pertinent key numbers relating to contract interpretation, and (b) a control query that uses all or virtually all of the pertinent key numbers relating to contracts generally. Unfortunately, this study design suffers from overwhelming logistical, technical, and methodological challenges—challenges that resulted in my abandoning the project. The next three subparts explain these challenges.

1. Logistical Challenges

Recall that many topics and subtopics in the Key Number System cover multiple, distinct legal subjects. Because of this “overbreadth” problem,¹⁹³ deciding which key numbers to include in a Westlaw search for a particular type of case often requires that a researcher analyze a representative sample of opinions classified with the key numbers that are candidates for the study. Such work ensures that all key numbers used in the data-collection queries exclusively or at least overwhelmingly concern the right legal topics.

To better understand how overbreadth operates, some elaboration is needed regarding four basic methods of searching for cases tagged with relevant key numbers. First, a search may list specific key numbers that contain no sub-parts. For example, to find cases that discuss duress as a

191. I used both manual review and Westlaw term searches in my testing for over-coding, overbreadth, and foreign law in Study One. See Silverstein, *supra* note 12, at 292-93, 293 n.475.

192. I did run several dozen Westlaw searches during the writing of Article One and this Article in an attempt to develop some type of test for under-coding. But every search clearly suffered from fatal reliability problems. For example, I ran several searches for cases containing terms relating to contract interpretation in the body of the opinion, but with no headnotes classified with the interpretation-related key numbers I used in Studies One and Four. Unfortunately, all of the sufficiently broad queries retrieved numerous cases that did not involve contract interpretation. As a result, the only way to verify the scope of under-coding in the search results would be to actually read all of the decisions recovered by the queries. That would entail going through literally tens of thousands of cases, which is both impracticable and defeats the point of using the Key Number System to streamline empirical research. *But cf. infra* text accompanying note 453 (explaining that it is possible to design a study to account for under-coding when the study concerns a topic that is narrow in scope, as opposed to a broad subject like whether textualism or contextualism has higher enforcement costs).

193. For a discussion of overbreadth, see Silverstein, *supra* note 12, at 250, 292-93; *supra* note 98 and accompanying text.

defense to the enforcement of a release, one would put the following language in a Westlaw query: 331k178.¹⁹⁴ Second, a search may list specific key numbers that contain other key numbers as sub-parts. To illustrate, 331k17 concerns fraud as a defense to the enforcement of a release.¹⁹⁵ But a query containing that key number will obtain all cases tagged with 331k17(.5) (“In general”), 331k17(1) (“Indebtedness or liability in general”), and 331k17(2) (“Damages for injury to person”), which are sub-parts of 331k17.¹⁹⁶ To pull a narrower set of decisions, a researcher must use just one or two of the three key numbers that together constitute 331k17.

Third, an attorney can search for all key numbers in an outline heading of a topic. For example, all key numbers in section II of the Release topic relate to the “Construction and Operation” of releases.¹⁹⁷ To search for cases classified with any of the twenty-six key numbers contained in that section, one would enter the following: to(331II). Fourth, and last, an attorney can search for cases marked with any of the key numbers that comprise a topic. To find every case classified with one of the ninety-four key numbers in topic 331, the query would state this: to(331).

I employed all four search techniques in Study One.¹⁹⁸ In my interpretation queries, I used stand-alone key numbers with no sub-parts, such as 95k143.5 (“Construction as a whole”).¹⁹⁹ I employed key numbers with sub-parts, like 95k147 (“Intention of parties”).²⁰⁰ And I included terms that pulled all cases with key numbers that fall under two outline headings of the Evidence topic: to(157XI(D)) and to(157XI(A)).²⁰¹ Finally, for my control search, I put in language that gathered all cases marked with any key number from the Contracts topic: to(95).²⁰²

Overbreadth can create issues with any of those four types of searches. To illustrate, 157k451 is part of the Evidence topic. This key number concerns the relationship of patent ambiguities to extrinsic evidence and contains no sub-parts.²⁰³ But the number is used to classify

194. WEST’S ANALYSIS OF AMERICAN LAW, *supra* note 109, at 1540.

195. *Id.*

196. *Id.*

197. *Id.* at 1540-41.

198. See Silverstein, *supra* note 12, app. 1 at 313-16.

199. WEST’S ANALYSIS OF AMERICAN LAW, *supra* note 109, at 368.

200. *Id.* at 368.

201. *Id.* at 715-19.

202. *Id.* at 363.

203. *Id.* at 719.

rules of law relating to both contracts and wills,²⁰⁴ which are distinct legal subjects. Next, consider 157k449. That key number is entitled “Nature of ambiguity or uncertainty in instrument” and it contains sixteen sub-key numbers, including 157k451.²⁰⁵ Many of those sub-key numbers concern both contracts and wills.²⁰⁶ Thus, 157k449 itself relates to each of those fields of law.

Key numbers 157k449 and 157k451 are contained in section XI.D of the Evidence topic.²⁰⁷ Section XI is entitled “Parol or Extrinsic Evidence Affecting Writings” and section XI.D is entitled “Construction or Application of Language of Written Instrument.”²⁰⁸ Like its component key numbers, section XI.D concerns the use of extrinsic evidence to interpret multiple types of documents, including contracts and wills.²⁰⁹ Finally, the Evidence topic encompasses several distinct legal fields, including procedural rules like those in the Federal Rules of Evidence and substantive rules such as the parol evidence rule.²¹⁰

To minimize the impact of overbreadth in Study One, I conducted a thorough review of judicial opinions containing headnotes classified with the key numbers related to contract interpretation that were candidates for inclusion in my Westlaw searches. My goal was to place in the data-collection queries only key numbers that are exclusively or overwhelmingly about interpretation or the parol evidence rule. Accordingly, for every key number potentially related to those subjects in topics 95 (Contracts) and 157 (Evidence), I reviewed between twenty and forty cases. This analysis led to the exclusion of many key numbers. For example, 95k168 is contained in section II.A of the Contracts topic, which is entitled “General Rules of Construction.”²¹¹ Given its location, one might think that this key number is concerned with contract interpretation. But 95k168 deals primarily with the duty of good faith, a topic that is distinct from both interpretation and the parol evidence rule.

204. *Compare* Nationstar Mortg. Co. v. Levine, 216 So. 3d 711, 712 (Fla. Dist. Ct. App. 2017) (applying the key number to legal rules concerning contracts in headnotes 7, 8, 10, and 11), *with* First Nat’l Bank of Mount Dora v. Shawmut Bank of Bos., 389 N.E.2d 1002, 1003 (Mass. 1979) (applying the 157k451 key number to a legal rule concerning wills in headnote five).

205. WEST’S ANALYSIS OF AMERICAN LAW, *supra* note 109, at 718-19.

206. To see this, review some of the cases pulled by running the following two searches on Westlaw in the All States and All Federal databases. Search One: 157k449. Search Two: (157k449 /p will) & TO(409).

207. WEST’S ANALYSIS OF AMERICAN LAW, *supra* note 109, at 718-19.

208. *Id.* at 715, 718.

209. To see this, review some of the cases pulled by running the following two searches on Westlaw in the All States and All Federal databases. Search One: to(157XI(D)). Search Two: to(157XI(D)) & to(409).

210. WEST’S ANALYSIS OF AMERICAN LAW, *supra* note 109, at 697-724.

211. *Id.* at 368.

I thus concluded that the key number does not belong in my data-collection searches.²¹² Likewise, 95k353(6) applies to jury instructions addressing contract construction.²¹³ But in the sample of headnotes I reviewed that employ this key number, only around half involved interpretation. Accordingly, 95k353(6) merited exclusion as well. By contrast, the caselaw review also resulted in my determining that the various Evidence key numbers discussed above that involve both contracts and wills²¹⁴ belonged in the study. That is because only a tiny fraction of the cases marked with those classifications actually concern wills.²¹⁵

Note that a careful assessment of the cases tagged with a particular key number or group of key numbers is not always necessary before using the classifications in a research project. In Study One, for example, I analyzed a much smaller sample of decisions in crafting my control searches—the searches designed to find cases about contracts generally.²¹⁶ That is because topic 95 is named “Contracts.” As a result, I felt that it was reasonably safe to assume that each key number under that topic sufficiently concerns contract law to warrant inclusion in the control search.

The critical point is this: Because of the problem of overbreadth, many empirical projects using the Key Number System will require that the author test topics, sections of topics, and specific key numbers before incorporating them into the Westlaw searches that make up the study.

Some research focuses on discrete legal subjects for which there are only a few relevant topics or specific key numbers. In those circumstances, reviewing cases classified with potentially applicable key numbers should take little effort. To illustrate, because I restricted the searches for interpretation cases in Study One to the core key numbers relating to contract interpretation and the parol evidence rule,²¹⁷ the

212. Silverstein, *supra* note 12, at 288.

213. WEST’S ANALYSIS OF AMERICAN LAW, *supra* note 109, at 375.

214. See *supra* notes 203–09 and accompanying text.

215. For example, two searches confirmed that only a tiny fraction of the judicial opinions classified with key numbers from section XLD of the Evidence topic during the time period of Study One potentially concern the interpretation of a will. The first search was for all cases marked with an XLD key number that did *not* contain any key number from the Wills topic (topic 409): to(157XI(D)) & da(aft 12/31/1999) & da(bef 01/01/2010) % to(409). This search returned 2718 cases. The second search was for all cases marked with an XLD key number that *did* contain a key number from the Wills topic: to(157XI(D)) & da(aft 12/31/1999) & da(bef 01/01/2010) & to(409). This search returned only eighteen decisions. And a number of those cases concerned both contracts and wills.

216. Silverstein, *supra* note 12, at 289.

217. *Id.* at 287.

analysis needed to select appropriate key numbers for those queries only required a few days.

But other study designs will necessitate far more work. The goal of Study Three was to use all or virtually all of the key numbers relating to contract interpretation in my interpretation searches and all or virtually all of the key numbers relating to contracts generally in my control searches. Unfortunately, numerous key numbers involve contract interpretation, and even more relate to contracts generally. As a result, the amount of work needed to construct the searches for this project would have been extraordinary. Since the main point of using key numbers in empirical scholarship is to save time and money, I concluded that finishing the review necessary for Study Three was not worth the effort, requiring that I abandon this project.

Let me offer some additional details to explain the scope of the problem. There are thirty-three topics in the general category of "Contracts."²¹⁸ At least fourteen of those topics have key numbers relating to interpretation or the parol evidence rule.²¹⁹ And some of the topics, like Contracts and Insurance, have several dozen such key numbers.²²⁰ In addition, at least ten topics outside the Contracts category contain key numbers that encompass interpretation and the parol evidence rule, including Evidence (topic 157),²²¹ Labor and Employment (topic 231H),²²² Landlord and Tenant (topic 233),²²³ Mines and Minerals (topic 260),²²⁴ and Secured Transactions (topic 349A).²²⁵ Reviewing a representative sample of cases for every one of these key numbers to determine which should be included in the Study Three queries would require a great deal of work.

218. WEST'S ANALYSIS OF AMERICAN LAW, *supra* note 109, at XI.

219. For some examples, see *supra* notes 181-84 and accompanying text.

220. See WEST'S ANALYSIS OF AMERICAN LAW, *supra* note 109, at 368-71 (topic 95, Contracts; key numbers concerning the construction and operation of contracts); *id.* at 977-78 (topic 217, Insurance; key numbers concerning general rules of construction for interpreting insurance policies); *id.* at 981-94 (topic 217, Insurance; these pages contain key numbers relating to various types of insurance, and in each section there are key numbers concerning the interpretation of coverage provisions).

221. *Id.* at 715-19 (Section XI of topic 157 is entitled "Parol or Extrinsic Evidence Affecting Writings.").

222. *Id.* at 1105 (231Hk437 and its associated sub-key numbers concern the interpretation of pension plans, which are generally contracts.).

223. *Id.* at 1149 (Section II of topic 233 is entitled "Leases and Agreements in General" and section II.B is entitled "Construction and Operation.").

224. *Id.* at 1253-54 (Sections II.C.1 and II.C.2 of topic 260 concern the construction and operation of mining leases and oil and gas leases.).

225. *Id.* at 1586 (Section III of topic 349(A) concerns the construction and operation of security agreements.).

Now consider the control search. All thirty-three topics in the Contracts category relate to contracts. And numerous topics that fall under the categories of Persons, Property, Torts, Crimes, Remedies, and Government also concern contracts partly or in full. In fact, I examined at least forty-five topics contained in categories other than Contracts that involve contract law or contract litigation to a significant degree. Some are listed in the previous paragraph.²²⁶ Others include the following: Accord and Satisfaction (topic 8),²²⁷ Assignments (topic 38),²²⁸ Copyrights and Intellectual Property (topic 96),²²⁹ Damages (topic 115),²³⁰ Deeds (topic 120),²³¹ Fraud (topic 184),²³² Infants (topic 211),²³³ Limitation of Actions (topic 241),²³⁴ Marriage and Cohabitation (topic 253),²³⁵ Principal and Agent (topic 308),²³⁶ Public Employment (topic 316P),²³⁷ and Specific Performance (topic 358).²³⁸ As these examples make clear, there is a staggering quantity of key numbers that are candidates for the control search. Analyzing even a sizeable portion of those subtopics would take months, if not longer.

Recall that for Study One, I conducted only minimal testing of topic 95 (Contracts) because I presumed that all key numbers in that topic sufficiently focus on contract law to warrant inclusion in the control

226. See *supra* notes 221-25 and accompanying text.

227. WEST'S ANALYSIS OF AMERICAN LAW, *supra* note 109, at 6-7. Despite topic 8 falling under the Remedies category, an accord and satisfaction is essentially a contract. See 1 C.J.S. *Accord and Satisfaction* § 1 (2018).

228. WEST'S ANALYSIS OF AMERICAN LAW, *supra* note 109, at 131-32 (Section II of topic 38 concerns modes of assigning property and section IV of that topic contains various key numbers relating to contracts, including 38K72 which is entitled "General rules of construction.").

229. *Id.* at 383 (99k49 is entitled "Contracts relating to copyright.").

230. *Id.* at 568-76. Several aspects of the Damages topic relate to contracts. For example, section IV of topic 115 is entitled "Liquidated Damages and Penalties." *Id.* at 571. Section VI.C contains key numbers regarding the measure of damages for breach of contract. *Id.* at 572. And section VII.C contains key numbers regarding the amount awarded for breach of contract. *Id.* at 574.

231. *Id.* at 588-89 (Section III.A of topic 120 concerns the "General Rules of Construction" relating to deeds.); see also 26A C.J.S. *Deeds* § 3 (2018) (explaining that deeds are often contracts).

232. WEST'S ANALYSIS OF AMERICAN LAW, *supra* note 109, at 819-22. Fraud, of course, is a signature defense to the enforcement of a contract. See RESTATEMENT (SECOND) OF CONTRACTS §§ 159-72 (AM. LAW INST. 1981).

233. WEST'S ANALYSIS OF AMERICAN LAW, *supra* note 109, at 921-22 (section III of topic 211 is entitled "Contracts").

234. *Id.* at 1183-84 (setting forth numerous key numbers regarding the statutes of limitations applicable to various types of contracts).

235. *Id.* at 1213 (Section IV.C of topic 253 involves contracts in the context of marriage.).

236. *Id.* at 1426-29 (Sections I and II of topic 308 concern the creation of and duties pertaining to the principal/agent relationship.).

237. *Id.* at 1481 (316Pk223 concerns the rights of public employees under employment contracts.).

238. *Id.* at 1653-56 (describing this topic as involving "[a]ctions to compel performance of contracts by parties thereto").

search.²³⁹ One might think that I could make a comparable presumption for other topics in the Contracts category, limiting the amount of work required to verify which key numbers belong in the Study Three control searches. But that is not the case, since many—if not most—of those topics also cover subjects that are outside the field of contracts. For example, Customs and Usages (topic 113) concerns both contracts and torts;²⁴⁰ Frauds, Statute of (topic 185) concerns both contracts and property;²⁴¹ and Insurance (topic 217) concerns both insurance policies, which are contracts, and the regulation of the insurance industry.²⁴² Indeed, some topics in the Contracts category actually appear to be primarily concerned with bodies of law other than contracts. To illustrate, based on a summary review of the caselaw, I concluded that a clear majority of opinions tagged with key numbers from topic Implied and Constructive Contracts (topic 205H) concern restitution or unjust enrichment rather than contract law.²⁴³ Finally, virtually every topic that involves the law of contracts, but that falls under one of the other Key Number System categories, also concerns other bodies of law. Classic examples include Evidence (topic 157)²⁴⁴ and Damages (topic 115),²⁴⁵ which are in the Remedies category. Therefore, even if I could safely assume that every topic in the Contracts category largely focuses on contract law, I would still need to analyze the topics contained in other categories.

Despite these logistical hurdles, I did begin a comprehensive review of the Key Number System in an effort to gather all key numbers relating to either interpretation specifically or contracts generally. I began by analyzing a minimum of twenty cases for most individual key

239. See *supra* text accompanying note 216.

240. To see this, review the cases returned by the following Westlaw search: (to(113) /p negligence "standard #of care") & to(97C) to(117) to(184) to(198H) to(272) to(313A) to(379).

241. WEST'S ANALYSIS OF AMERICAN LAW, *supra* note 109, at 822 (explaining that topic 185 covers statutes that require a writing for certain types of contracts and statutes that require a writing for other methods of transferring real property); see also 37 C.J.S. *Frauds, Statute of* § 84 (2018) ("Unless there are conditions taking the case out of the statute of frauds, a gift of land must be in writing.").

242. WEST'S ANALYSIS OF AMERICAN LAW, *supra* note 109, at 963.

243. For example, of the 3353 cases classified with a topic 205H key number during the first decade of this century, only 1103 also contain a key number from topic 95. To see this, run the following two searches on Westlaw in the All States and All Federal databases. Search One: to(205H) & da(aft 12/31/1999) & da(bef 01/01/2010). Search Two: to(205H) & da(aft 12/31/1999) & da(bef 01/01/2010) & to(95). In addition, 2575 of the 3353 cases contained the word "restitution" or the phrase "unjust enrichment" in the same headnote as the topic 205H key number. To see this, run the following search: (to(205H) /p restitution "unjust enrichment") & da(aft 12/31/1999) & da(bef 01/01/2010).

244. WEST'S ANALYSIS OF AMERICAN LAW, *supra* note 109, at 697-724.

245. *Id.* at 568-76.

numbers/subtopics that were candidates for the study.²⁴⁶ But it quickly became clear that completing this review would take hundreds or even thousands of hours. So I discarded this approach. I next tried reviewing a minimum of fifty cases for each potentially relevant topic—for example, Release (topic 331) and Frauds, Statute of (topic 185). That sped up the process dramatically. Unfortunately, this protocol did not include a sufficient number of cases to plausibly constitute a representative sample of the opinions tagged with the key numbers from each topic. And the same was true when I attempted to go through fifty cases for various outline headings in each topic—for example, section II of Landlord and Tenant (topic 233) which concerns “Leases and Agreements in General.”²⁴⁷ As a result, I abandoned these approaches as well.

2. Technical Challenges

Even if I completed the work necessary to select the appropriate interpretation and contracts key numbers for Study Three, I would not be able to run Westlaw searches that contain all of those key numbers. That is because West restricts queries on its platform to 600 characters, including spaces. A search with all of the interpretation or contract key numbers would greatly exceed that limit. Thus, Study Three suffers from an insurmountable technical problem.

To explain, a slightly modified version of the broadest interpretation key number search run in Study One contains 277 characters.²⁴⁸ Section XIII.G of Insurance (topic 217) covers the general rules of interpretation applicable to insurance policies.²⁴⁹ That section contains an additional twenty-nine key numbers (not including sub-parts). Adding those twenty-nine key numbers to the largest interpretation query from Study One increases the total characters in the search to 538.²⁵⁰ That leaves only sixty-two characters for additional search language. But there are at least twenty-one topics beyond Contracts, Evidence, and Insurance that contain key numbers focusing

246. Some key numbers so clearly did or did not involve either interpretation specifically or contracts generally that I was able to confirm the appropriateness of their inclusion in the study after analyzing a smaller number of cases.

247. WEST’S ANALYSIS OF AMERICAN LAW, *supra* note 109, at 1149-50.

248. Note that the precise modifications I made to the search are not important for purposes of this discussion. In addition, 277 characters is the length when the search is seeking only state court decisions. An additional nine characters are needed to collect both state and federal authorities. For example, to retrieve state and federal cases in Indiana, the following language must be added to the search (including the space after the ampersand): co(in) & .

249. WEST’S ANALYSIS OF AMERICAN LAW, *supra* note 109, at 977-78.

250. Each insurance key number requires an additional nine characters: the actual key number (for example, 217k1805) and a space. Twenty-nine times nine equals 261. And 261 plus 277 from the original query equals 538 characters.

on interpretation. Adding only a tiny fraction of those numbers to the query will push the total over 600 characters. It is thus not possible to run a Westlaw search that contains all key numbers relating to the interpretation of contracts.

One might respond that I could use outline headings in my Westlaw queries, as I did when searching for Evidence key numbers in Study One.²⁵¹ For example, if every key number in section XIII.G of Insurance exclusively or overwhelmingly concerns the construction of insurance policies, then I could add to(217XIII(G)) to the search and avoid listing all twenty-nine key numbers in that section, saving over 200 characters.

Employing section-based query language would allow for the inclusion of more key numbers in my interpretation searches; but such language can be used only when all of the key numbers in a topic section focus on interpretation. And numerous interpretation key numbers are grouped in topic sections with other classifications that have little or nothing to do with the construing of agreements. For example, section II.A of Contracts contains “General Rules of Construction.”²⁵² However, four key numbers in that part primarily concern subjects that are distinct from interpretation: 95k144 (“What law governs”) and 95k145 (“Place of making contract”) deal with choice of law, 95k168 (“Terms implied as part of contract”) addresses good faith and other implied terms, and 95k146 is principally about the moment a contract becomes effective.²⁵³ Thus, I cannot use to(95II(A)) in my searches because that language will retrieve too many irrelevant cases. Likewise, section II of Vendor and Purchaser (topic 400) contains key numbers that focus on interpretation and numbers that address other legal concepts.²⁵⁴ That bars me from adding to(400II) to my interpretation queries. Given these key number grouping practices, section-based search phrases that encompass multiple key numbers cannot solve the problem of the 600-character limit.

Another way I might be able to reduce the characters in my Westlaw searches is to exclude key numbers that are rarely used. To illustrate, 400k51 is one of the subtopics concerned with interpretation in Vendor and Purchaser. But West’s classification attorneys did not tag a single headnote with that key number during the ten-year period of Study

251. See *supra* note 201 and accompanying text.

252. WEST’S ANALYSIS OF AMERICAN LAW, *supra* note 109, at 368.

253. *Id.* at 368. These conclusions are based on my analysis of a representative sample of cases tagged with these key numbers.

254. For example, 400k50 (“Construing instruments together”) and 400k51 (“Extrinsic circumstances”) focus on interpretation. *Id.* at 1812. 400k47 (“What law governs”) focuses on choice of law. *Id.* And 400k48 (“Place and time of making contract”) focuses on the point in time a contract becomes effective. *Id.*

One.²⁵⁵ Excluding 400k51 from Study Three, in which I intended to use the same time-period, would therefore not impact the search results. Unfortunately, omitting key numbers like 400k51 from the interpretation queries does not bring the total characters below 600 either because there are simply too many regularly-assigned key numbers that primarily concern contract interpretation.²⁵⁶

This Part has focused on the technical barrier created by the 600-character limit for searches employing all pertinent contract interpretation key numbers. The problem is likely even greater for my control queries. That flows from the fact that there are many more topics and key numbers concerned with contracts generally than with interpretation specifically.²⁵⁷ Note that employing search terms that cover entire topics or sections thereof is not a solution here either. There are at least seventy-five topics with key numbers involving contract law that are candidates for inclusion in the control queries. And the minimum number of characters necessary for adding most topics to the search is seven or eight, depending on whether the topic is two digits or three digits. For example, to include Contracts requires seven characters: to(95) and a space. To include Insurance requires eight characters: to(217) and a space.²⁵⁸ Roughly three-quarters of the topics relating to contracts are three digits. The average length for each search term would thus be seven and three-quarters characters. Multiplying that figure by seventy-five results in a total of 581 characters. But my analysis confirmed that the control searches cannot be limited to search language that covers entire topics. Remember that many of the relevant topics relate to both contract law and other legal subjects. Thus, more precise search language is required or else the queries will retrieve too many irrelevant judicial opinions. Once the searches must contain topic section headings and individual key numbers, the 600-character limit will be exceeded quickly. That is so even if an analysis of the cases tagged with various key numbers confirmed that multiple topics should be excluded from the control searches.

Another potential solution to the character limit that I considered is subdividing the searches. For example, if a total of 1100 characters is needed to search for all interpretation-related key numbers, I could split

255. To see this, run the following search on Westlaw in the All States and All Federal databases: 400k51 & da(aft 12/31/1999) & da(bef 01/01/2010).

256. This conclusion is based on extensive testing that I conducted. The testing is on file with the Author.

257. For some data supporting this conclusion, see *supra* notes 218-38 and accompanying text.

258. A few topics relating to contracts would require only six characters. For example, Accord and Satisfaction is topic 8. To include that subject in a search would require inserting to(8) and a space.

the search language into two queries and then run two searches for each state in the study rather than one. But this approach is not workable. That is because some cases will be retrieved by both query one and query two. My research assistants would then need to compare the decisions pulled by the two queries to filter out duplicates.²⁵⁹ This would involve a great deal of effort, once again defeating the point of employing key numbers in empirical research. And the duplicates problem will be particularly severe if the total number of needed characters is over 1200, requiring three searches rather than two.²⁶⁰

3. Methodological Challenges

There are two types of methodological challenges specific to Study Three. Type one concerns problems that the Study Three protocol would generate even if the logistical and technical issues discussed in the prior two parts did not exist. Type two concerns challenges that would be created if I revised the Study Three protocol to account for those logistical and technical problems.

Two type-one issues warrant attention here. The first is that it is not possible to gather every reported decision that addresses contract interpretation or contracts by crafting Westlaw searches comprised of key numbers that focus on those subjects. That is because some interpretation and contract cases are classified only with key numbers that primarily address other legal concepts or fields. Let me explain.

Many propositions of law are related to numerous key numbers. And those numbers are often spread across multiple key number topics. However, West's staff seldom classifies a headnote with more than five key numbers.²⁶¹ And headnotes are frequently tagged with three, two, or just one key number, even though up to a dozen numbers are applicable.²⁶² This results in significant under-coding in the reported

259. To illustrate, if I place the interpretation key numbers from Contracts (topic 95) in query one and the comparable key numbers from Insurance (topic 217) in query two, multiple cases will be contained in both sets of results. For example, from 2000 through 2009, there are 8387 cases marked with the interpretation key numbers from topic 95 that I used in Study One. During that same period, there are 4611 cases classified with key numbers from section III.G of topic 217, which covers the general rules of interpretation applicable to insurance policies. Finally, 862 cases appear in both groups because they are tagged with at least one key number from each set. Decisions like those would need to be removed from the totals of at least one of the two queries, otherwise they would be double-counted, corrupting the study findings.

260. Perhaps there is software that can search for identical entries in Westlaw query results. But I decided not to investigate this possibility given all of the other problems with Study Three.

261. E-mail from Sara Haselbauer, Reference Attorney, Thomson Reuters, to Author (Aug. 23, 2018) (on file with author) ("[I]t is rare that more than five Key Numbers will be added to a headnote. However, in unusual circumstances, we will add more than five.").

262. This conclusion is based on my many years of reading key number classifications of

caselaw. Consider two examples. In *Batales v. Friedman*, the portion of the opinion involving contract interpretation was tagged with a single key number from Limitation of Actions (topic 241).²⁶³ The West classification attorney apparently used that number because the case turned on (1) the meaning of a contractual provision setting a time limit to sue for breach of the agreement, and (2) whether that provision or the pertinent statute of limitations set the operative deadline.²⁶⁴ Likewise, in *Perdue Bioenergy, LLC v. Clean Burn Fuels, LLC*, a bankruptcy adversary proceeding, a section of the decision dealt with the admissibility of extrinsic evidence offered to establish that a contract was ambiguous.²⁶⁵ But the associated headnote was only categorized with a key number from Bankruptcy (topic 51) that covers the admissibility of evidence in bankruptcy actions generally.²⁶⁶ Most headnotes tagged with the key numbers from *Batales* and *Perdue Bioenergy* do not concern interpretation.²⁶⁷ Thus, I cannot include those numbers in a search for interpretation decisions because they would retrieve too many irrelevant cases. As a result, a Westlaw search for interpretation opinions would not find *Batales* or *Perdue BioEnergy* even if the query contained *every* key number primarily concerned with that subject. This shows that even the most comprehensive key number searches often cannot fully account for under-coding.

Fortunately, the type of under-coding discussed in the last paragraph will not impact the results of empirical studies employing datasets created with the Key Number System unless the under-coding varies across states lines, over time, or by key number topic. I encountered no such variation during my work on Article One and this Article (though my analysis of the issue was certainly not exhaustive). Accordingly, I believe that the exclusion of relevant published decisions from a dataset—because the cases contain no key numbers primarily focused on the legal issues addressed by the study—will normally not bias any research findings.

headnotes.

263. 41 N.Y.S.3d 275, 276, 277 (App. Div. 2016) (see, in particular, headnote four). The key number is 241k14 (“Agreements as to period of limitations”). WEST’S ANALYSIS OF AMERICAN LAW, *supra* note 109, at 1183.

264. *Batales*, 41 N.Y.S.3d at 276-77.

265. 559 B.R. 130, 133-34 (M.D.N.C. 2016).

266. *Id.* at 131 (see headnote one). The key number is 51k2163 (“Evidence; witnesses”). WEST’S ANALYSIS OF AMERICAN LAW, *supra* note 109, at 171. For another case with the same structure as *Perdue Bioenergy*, see *ML Manager, LLC v. Hawkins (In re Mortgs. Ltd.)*, 559 B.R. 508, 508-09, 517-19 (Bankr. D. Ariz. 2016) (see headnotes one through five).

267. I reviewed a representative sample of headnotes classified with each key number.

The second type-one challenge is that using key numbers from topics other than Contracts (topic 95) and Evidence (topic 157) in the interpretation queries could introduce new confounding variables. In Study One, I restricted the interpretation searches to key numbers from one section of Contracts (II.A) and from three sections of Evidence (XI.A, XI.C, and XI.D).²⁶⁸ Additionally, the precise key numbers that I used focus on general principles of construction that apply to most classes of agreement.²⁶⁹ But virtually every interpretation-related key number from *outside* Contracts and Evidence addresses only one type of contract. For example, the key numbers in section XIII.G of Insurance exclusively concern the interpretation of insurance policies.²⁷⁰ Likewise, 331k25 covers “[g]eneral rules of construction” for releases.²⁷¹ Including such key numbers in a search for interpretation decisions could bias the search totals by exaggerating or understating the difference between textualist and contextualist states. This impact is best illustrated by example.

Suppose that textualist and contextualist jurisdictions have adopted special rules for the interpretation of insurance policies that supplement the general principles of construction. Assume further that the insurance-specific rules vary between the two sets of states. That difference could affect interpretation litigation levels. For example, suppose that the contextualist territories employ special rules that are more favorable to insureds than the rules in textualist states. That could increase the amount of litigation regarding the meaning of insurance policies in contextualist states in comparison to textualist jurisdictions. And if that is so, then adding the key numbers from section XIII.G of the Insurance topic to the interpretation queries will distort the search results. With the insurance key numbers included, any difference in the total number of interpretation decisions retrieved for the textualist and contextualist

268. Silverstein, *supra* note 12, at 287-88, 295 tbl.3, app. 1 at 313-16.

269. Start with Contracts. Section II.A of topic 95 is entitled “General Rules of Construction.” WEST’S ANALYSIS OF AMERICAN LAW, *supra* note 109, at 368 (emphasis added). In addition, the introduction to topic 95 in WEST’S ANALYSIS OF AMERICAN LAW lists seventeen “[p]articular kinds of contracts” that are excluded from the Contracts topic and are instead covered by other topics. *Id.* at 364. Now consider Evidence. Section XI of topic 157 is entitled “Parol or Extrinsic Evidence Affecting Writings.” *Id.* at 715 (emphasis added). Section XI.D is entitled “Construction or Application of Language of Written Instrument.” *Id.* at 718 (emphasis added). And section XI.A is entitled “Contradicting, Varying or Adding to Terms of Written Instrument.” *Id.* (emphasis added). Technically, many of the individual key numbers in XI.A address only a single type of writing. But the section XI.A key numbers as a group cover virtually every type of instrument. And I used *all* of the key numbers from that section in query three of Study One. See Silverstein, *supra* note 12, at 295 tbl.3, app. 1 at 313-16.

270. See WEST’S ANALYSIS OF AMERICAN LAW, *supra* note 109, at 977-78.

271. *Id.* at 1540.

groups will now reflect both (1) the variation in general interpretation law (i.e., textualism versus contextualism), and (2) the variation specific to insurance policies (i.e., more favorable treatment of insureds versus less favorable treatment).²⁷²

The example in the last paragraph concerned the impact of a hypothetical *disparity* in the interpretation doctrine across state lines that goes beyond the standard textualist/contextualist divide. Now consider an illustration where legal *similarities* among the textualist and contextualist groups would cause an analogous problem. Suppose that textualist and contextualist territories have adopted the *same* special rules concerning the interpretation of insurance policies. In that case, including Insurance key numbers in the interpretation queries would likely cause the search results to understate the differences between textualist and contextualist jurisdictions. For example, assume that the ratio of (1) cases tagged with *Contracts and Evidence interpretation* key numbers, to (2) cases classified with *any Contracts* key number, is slightly larger in textualist states than in contextualist states, as I found in Study One.²⁷³ Assume further that because both groups of states employ the same special rules regarding the construction of insurance policies, the ratio of cases tagged with *Insurance interpretation* key numbers to those tagged with *any Contracts* key number is *identical* in the two sets of states.²⁷⁴ In that situation, adding the Insurance key numbers to the interpretation queries will *reduce* the difference between the textualist and contextualist search results. For a hypothetical demonstration of this point, read the footnote at the end of this sentence.²⁷⁵

272. Note that a divergence in interpretation doctrine that is separate from whether states use textualism or contextualism is not addressed by my control searches. Those searches are intended to control for inter-state differences that have the same basic impact on the number of interpretation cases specifically as they do on the number of contract cases generally—such as differences in population, rules of procedure, and opinion publishing practices. See *supra* text accompanying note 127. But a disparity over something like the supplemental rules that apply to the construction of insurance policies does not have a comparable impact on interpretation and contract disputes. Instead, this type of variation affects the level of interpretation litigation far more. Accordingly, my control search is of no help in solving this potential problem.

273. Silverstein, *supra* note 12, at 295-98.

274. This is inconsistent with the testing I conducted in Study One. *Id.* at 292 n.471. But the example here is only intended to illustrate the problem.

275. Here is a simple example: Suppose that in textualist states there are ten cases tagged with a *Contracts or Evidence interpretation* key number for every twenty cases tagged with any *Contracts* key number. And in contextualist states there are eight cases tagged with a *Contracts or Evidence interpretation* key number for every twenty cases tagged with a *Contracts* key number. The textualist ratio is fifty percent and the contextualist ratio is forty percent. Finally, fifty is twenty-five percent higher than forty. In other words, the textualist ratio is twenty-five percent higher than the contextualist ratio.

To be sure, I do not know whether the existence of disparate and/or similar specialized interpretation caselaw is a serious problem. Answering that question would require extensive research and considerable testing that is not worth completing given the other issues with Study Three. But I felt it critical to include this discussion because there is certainly a real possibility that specialized doctrines could undermine many empirical studies employing key numbers that are used to classify distinct and technical legal subjects.²⁷⁶

Let me now turn to the second type of methodological challenge. Given the logistical and technical problems presented in the prior two parts, I considered altering the Study Three protocol. Unfortunately, every change I examined raised serious methodological concerns. The rest of this Part explains one potential revision in order to demonstrate the sorts of problems that would result if I modified Study Three to address the logistical and technical issues.

Recall again that in Study One I used only key numbers from Contracts (topic 95) and Evidence (topic 157) in the searches for judicial opinions concerned with interpretation.²⁷⁷ By contrast, the plan for Study Three was to include all key numbers that focus on that subject, regardless of which topic they fall under. This structure creates two basic problems. First, the effort needed to identify the complete list of appropriate key numbers for the searches would take too much time.²⁷⁸ Second, including every relevant key number in the query will require more than 600 characters.²⁷⁹ To avoid these problems, I considered

Continuing, assume further that (1) there are eight cases tagged with *Insurance* interpretation key numbers for every twenty cases tagged with any Contracts key number in both textualist and contextualist states, and (2) these Insurance cases do not overlap with the cases classified with Contracts or Evidence key numbers. Next, add the Insurance figures to the search totals for the Contracts and Evidence decisions. Now there are eighteen interpretation cases (cases tagged with insurance key numbers from Contracts, Evidence, *and* Insurance) for every case tagged with any Contracts key number in textualist states. And there are sixteen interpretation cases for every twenty cases tagged with any Contracts key number in contextualist states. The textualist ratio has risen to ninety percent and the contextualist ratio has risen to eighty percent. Finally, ninety is 12.5 percent higher than eighty. In other words, the textualist ratio is 12.5 percent higher than the contextualist ratio.

In this example, adding the Insurance interpretation key numbers to the Westlaw searches for interpretation decisions cuts in half the difference between the ratio of interpretation cases to contract cases in textualist states and contextualist states. Prior to the inclusion of the insurance decisions, the difference was twenty-five percent (fifty is twenty-five percent larger than forty). After the inclusion of the insurance decisions, the difference dropped to 12.5 percent (ninety is 12.5 percent larger than eighty).

276. See, e.g., CHARLES KNAPP ET AL., PROBLEMS IN CONTRACT LAW 409-10 (8th ed. 2016) (summarizing a jurisdictional split over a special insurance policy interpretation doctrine).

277. See *supra* text accompanying notes 109-16.

278. See *supra* Part V.B.1.

279. See *supra* Part V.B.2.

adding only selected interpretation key numbers from outside the Contracts and Evidence topics to the searches for interpretation cases. In essence, the plan would be to work on choosing relevant key numbers for the interpretation searches until I reach 600 characters, and then stop. This would require far less effort than identifying *all* of the key numbers that concentrate on interpretation, nullifying the logistical problems. Moreover, because the search would contain 600 (or fewer) characters, there would no longer be any technical barrier to running the interpretation queries on Westlaw.

The problem with making this change to Study Three is that there is no methodologically sound way to decide which interpretation key numbers from outside the Contracts and Evidence topics belong in the searches. And the choice could have profound effects on the study findings. For example, adding only the interpretation key numbers from section XIII.G of Insurance (topic 217) to the broadest query in Study One would critically change the results from that project. In Study One, the ratio of interpretation cases to contract cases in state court was 5.0% higher in textualist states than in contextualist states using the broadest query.²⁸⁰ If the Insurance key numbers are added to that search, then the ratio is 7.0% higher in *contextualist* states.²⁸¹ That is a dramatic shift. Other topics I reviewed would have less impact. But that just serves to illustrate the problem: selecting one group of key numbers for inclusion in the queries rather than another will almost certainly have a decisive influence on the study findings. Since there is no methodologically legitimate way to choose between the candidate key numbers, using only a subset of the numbers from outside Contracts and Evidence would fatally undermine the validity of Study Three.²⁸²

* * *

To summarize, the goal of Study Three was to execute a research protocol that addresses the under-coding weaknesses of Study One. The only way to accomplish that is to use, in my Westlaw searches, all or virtually all of the key numbers relating to contract interpretation and

280. Silverstein, *supra* note 12, at 295 tbl 3, 292 n.471.

281. *Id.* 292 n.471.

282. One might ask why the Study One protocol—using only Contracts and Evidence key numbers in the interpretation searches—is appropriate. The answer is that the key numbers I included in Study One concern general principles of interpretation applicable to most types of agreements. See *supra* note 269 and accompanying text. The key numbers under consideration for inclusion in Study Three are different: They are all associated with a particular type of agreement, such as insurance policies or releases. For some examples, see *supra* text accompanying notes 181-84, 218-25.

contracts generally. That creates three problems. First, as I explained in Part V.B.1, identifying the relevant key numbers would take too long. Second, as discussed in Part V.B.2, the 600-character limit applicable to Westlaw queries prevents me from including all of the relevant key numbers in my searches even if I took the time to select them. Third, as set out in Part V.B.3, modifying the Study Three design to address these challenges would result in fundamental methodological problems. Given all of those issues, Study Three is simply not feasible.

C. Study Four: Interpretive Change Across Time

Textualism is a “classical” contract doctrine and contextualism is a “modern” contract doctrine.²⁸³ The classical approach to contract law was dominant in the late nineteenth and early twentieth centuries.²⁸⁴ The modern approach emerged in the middle part of the last century and ultimately resulted in many changes to the American law of contracts.²⁸⁵ One of those changes was the spread of contextualist interpretation.²⁸⁶ The next project addresses whether the adoption of contextualism altered the level of interpretation enforcement costs in the states that embraced the new method of construing agreements. It entails comparing the ratio of interpretation litigation to general contract litigation in the five contextualist states from Study One²⁸⁷ during two distinct time periods: before and after each jurisdiction shifted from textualism to contextualism. The data for both eras would be gathered using essentially the same key number searches as in Study One.

One critical benefit of this research design is that it eliminates the need to control for variations between states. The comparison in Study Four is not textualist jurisdictions versus contextualist jurisdictions during a single time period, as in Studies One, Two, and Three. Rather, it is a set of states at time one (the textualism era) versus the *same* states at time two (the contextualist era).²⁸⁸

283. In fact, some authorities refer to them as the “classical approach” and the “modern approach” to contract interpretation. *See, e.g., Grumman Allied Indus., Inc. v. Rohr Indus., Inc.*, 748 F.2d 729, 733-34 (2d Cir. 1984).

284. Jay M. Feinman, *The Duty of Good Faith: A Perspective on Contemporary Contract Law*, 66 HASTINGS L.J. 937, 942 (2015).

285. CHARLES KNAPP ET AL., PROBLEMS IN CONTRACT LAW 31 (7th ed. 2012).

286. *See, e.g., Pacific Gas & Elec. Co. v. G.W. Thomas Drayage & Rigging Co.*, 442 P.2d 641, 643-45 & n.6 (Cal. 1968).

287. *See Silverstein, supra* note 12, at 286.

288. To be more precise, there is a distinct period one and period two for each jurisdiction since the states moved from textualism to contextualism at different points in time. *See infra* notes 294, 420 and accompanying text.

The Study Four methodology does introduce new confounding variables—namely legal and social differences between the two periods in each jurisdiction. These disparities could be just as large as those that exist across state lines during a single era, though I suspect they are smaller. In either case, the control search for general contract decisions should address the temporal differences at issue here as effectively as it did the geographical differences at issue in Study One. And combining the findings of the new project with those from my first study will produce a more complete picture of the effects of textualism and contextualism on enforcement costs. Accordingly, I decided to complete Study Four.²⁸⁹

Study One and Study Four are virtually identical in structure. Therefore, the strengths and weaknesses of the two projects—methodological and otherwise—are substantially the same.²⁹⁰ However, two of the weaknesses manifest in somewhat different ways in Study Four. The rest of this Part addresses those differences.

The first concerns the interpretation caselaw. Study One required that I identify five textualist and five contextualist states.²⁹¹ I selected the jurisdictions for both groups by analyzing the jurisprudence.²⁹² This process was difficult because the law of interpretation is exceptionally convoluted.²⁹³ As noted above in the first paragraph of this part, I chose to reuse the five contextualist states from Study One in Study Four. This time, rather than assessing the current state of the law, I needed to establish when each of those territories made the transition from textualism to the new approach. Once again, that necessitated a careful review of the decisional law because determining when a jurisdiction has completed the change to a new common law doctrine is often a complicated endeavor. Some territories, such as California, shifted from textualism to contextualism at a clear moment in time.²⁹⁴ The transition date for others, such as New Jersey, was much more difficult to identify. Nonetheless, I believe I was able to pinpoint the change for each of the five contextualist states with sufficient certainty to warrant conducting Study Four.

The second problem involves the control search. To measure the impact of each interpretive approach on enforcement costs, Study One

289. See *infra* Part VI.

290. For a discussion of the strengths and weaknesses of Study One, see *supra* notes 87-100, 129-40, 145-53 and accompanying text.

291. See Silverstein, *supra* note 12, at 286.

292. *Id.*

293. *Id.* at 301.

294. See *Pacific Gas & Elec. Co. v. G.W. Thomas Drayage & Rigging Co.*, 442 P.2d 641, 643-45 (Cal. 1968).

compared the ratio of contract interpretation litigation to general contract litigation in textualist and contextualist states—with the levels of each type of litigation being determined by the results of my key number searches.²⁹⁵ I used a search for all cases tagged with a key number from the Contracts topic as my control search in the denominator because I theorized that this would control for numerous differences between textualist and contextualist jurisdictions.²⁹⁶ But the search could not control for variations in *contract* law across states that impact the level of general contract litigation. That created a problem for Study One.

States that use textualism also typically follow other classical contract doctrines. Likewise, jurisdictions that employ contextualism normally conform to modern contract principles.²⁹⁷ Classical contract law is marked by clear rules and strict adherence to legal formalities such as the statute of frauds. By contrast, modern contract law favors general standards, such as “good faith” and “unconscionability,” and shows greater sympathy for equitable precepts.²⁹⁸ Many scholars, especially those in the field of law and economics, contend that legal norms that take the form of general standards cause more litigation than narrow rules do.²⁹⁹ Suppose they are correct, and thus there is more contract litigation in contextualist states because these jurisdictions have adopted most modern doctrines. That would lower the ratio of

295. Silverstein, *supra* note 12, at 286-90; *see supra* notes 109-26 and accompanying text.

296. Silverstein, *supra* note 12, at 289-91; *see supra* notes 123-28 and accompanying text.

297. *See generally* Geoffrey P. Miller, *Bargains Bicoastal: New Light on Contract Theory*, 31 CARDOZO L. REV. 1475, *passim* (2010) (discussing numerous differences between California’s “contextualist” contract law and New York’s “formalist” contract law, including differences regarding formation, defenses, interpretation, choice-of-law clauses, and arbitration clauses).

298. KNAPP, *supra* note 285, at 31.

299. *See* Ehud Guttel & Alon Harel, *Uncertainty Revisited: Legal Prediction and Legal Postdiction*, 107 MICH. L. REV. 467, 481-82, 481 nn.84, 85 & 88-90 (2008) (“The use of rules and standards, as law and economics scholars have shown, involves different costs and benefits[, and] standards usually entail higher enforcement and compliance costs than rules.”) (collecting authorities); Russell B. Korobkin, *Behavioral Analysis and Legal Form: Rules vs. Standards Revisited*, 79 OR. L. REV. 23, 32-33, 56-57 (2000) (concluding that combining behavioral analysis with economic analysis leads to the insight that “standards will be more expensive to apply [than rules] both because applying a standard usually will be more expensive than applying a rule and because more cases will be litigated in a standards regime than in a rules regime”); *see also* Louis Kaplow, *Rules Versus Standards: An Economic Analysis*, 42 DUKE L.J. 557, 571-73 (1992) (explaining why rules should have lower enforcement costs than standards). *But see id.* at 573 n.35, 575 n.41 (discussing various reasons why there might be more or less litigation under standards than under rules). There are two principal bases for this conclusion. First, standards increase litigation because they generate more uncertainty than rules. *See* Korobkin, *supra*, at 32 (“The ex ante certainty that rules provide should encourage more disputes to settle out of court and not require adjudication at all”). Second, when applying rules, adjudicators need merely decide whether the relevant facts are present. *Id.* But under standards, adjudicators must both uncover the facts and determine the precise content of the law since this was not done by the enactor ex ante. *Id.*; *accord* Kaplow, *supra*, at 570. The extra step requires the expenditure of additional resources.

interpretation cases to contract cases established by my key number searches for those territories, distorting any comparison between textualist and contextualist states. In sum, the Study One protocol could not account for the fact that the interpretive approach a state employs is generally correlated with other rules of contract law in that jurisdiction.

Study Four likely suffers from the same weakness. The comparison in this project is across time rather than across borders. But the embrace of contextualism in my five states was probably accompanied by the adoption of other modern contract rules during the same era. Notably, this problem may not be as severe in Study Four as it was in Study One. The time period for Study One was 2000 through 2009.³⁰⁰ By the turn of the millennium, the transition to the modern approach to contracts was generally complete.³⁰¹ In contrast, the contextualist time periods used in Study Four are generally before 2000.³⁰² It is possible that some of the states used in Study Four adopted contextualism well in advance of incorporating the full panoply of modern doctrines into their law. If that is the case, then the distortive effect of modern contract principles will be lower here than in Study One. However, even if the distortion is equally severe in both projects, that does not invalidate Study Four. Since disparities in general contract doctrine were not sufficient to preclude the completion of Study One, they are no bar with respect to Study Four either.

The rest of the discussion of Study Four—including further methodological points and the results—is set out in Part VI below.³⁰³

D. Study Five: Two Interpretive Systems Within a Single State

Article 2 of the Uniform Commercial Code (“UCC”) contains several statutes and comments that appear to adopt principles of contextualist interpretation.³⁰⁴ And some commentators believe, in light of these provisions, that the Code embraces a full-blooded form of contextualism.³⁰⁵ If this is correct, then courts in textualist jurisdictions are required to apply the contextualist approach when construing agreements for the sale of goods.³⁰⁶ In other words, textualist states

300. Silverstein, *supra* note 12, at 294.

301. Indeed, some states had started turning back towards the classical view by then. KNAPP, *supra* note 285, at 31.

302. See *infra* Tables 1-2.

303. See *infra* Part VI.

304. See U.C.C. § 1-303(d) & cmts. 1, 3 (2001); *id.* § 2-202 & cmts. 1(c), 2; *id.* § 1-201(b)(3) & cmt. 3.

305. See sources cited *infra* note 363.

306. Article 2 only governs transactions in goods. U.C.C. § 2-102.

actually employ two different methods of interpretation: contextualism for goods-based contracts and textualism for most other contracts. The final proposed study takes advantage of this dual system. It involves comparing (a) the ratio of common law interpretation cases to common law contract cases, with (b) the ratio of UCC interpretation cases to UCC contract cases, in a set of textualist territories during a specified time period. To collect and code the common law decisions, I would use the Contracts (topic 95) and Evidence (topic 157) key numbers from Study One. And to collect and code the UCC opinions, I would use Sales (topic 343) key numbers. Since the common law cases in the relevant jurisdictions employ textualism and the UCC decisions apply contextualism, the proposed comparison could highlight the impacts of each interpretive approach within a single group of states during a single time period.³⁰⁷

This research structure has two critical advantages over the design of the other projects. First, unlike Studies One, Two, and Three, all data comparisons are intrajurisdictional, nullifying the need to control for differences across state lines. Second, because the textualist and contextualist data for each territory comes from the same era, there is no need to control for legal and social changes across time, something that is necessary for Study Four.

Unfortunately, Study Five also suffers from several weaknesses. Some of these problems can be overcome, but one is fatal. Thus, I decided not to complete the project. In the rest of Part V.D, I briefly discuss four of the lesser problems and then turn to a full exposition of the disqualifying limitation.

The first weakness is that the research protocol for Study Five introduces new confounding variables. There are numerous potential distinctions between contracts for the sale of goods and agreements that are regulated by the common law—such as those for services and real estate. Let me offer two possibilities. First, the types of parties that execute contracts for goods probably vary from those who enter other types of transactions. Second, common law litigation may differ from statutory litigation in crucial ways. Importantly, I suspect that the confounds for Study Five are smaller in number than those for Studies

307. Note that I am using phrases like “UCC interpretation cases” and “UCC contract cases” only to refer to decisions applying the rules set forth in *Article 2* of the UCC. This study does not concern interpretation or contract opinions arising under other articles of the code, such as *Article 9* (which regulates secured transactions). Of course, one might design a study similar to mine that compares contract interpretation under the common law to contract interpretation under the entire UCC. But I suspect that such a study would face even more problems than the project discussed here.

One through Four. That is because variations among states and across time periods are likely more significant than the differences between common law contracts and UCC contracts. Therefore, since I believe that my control mechanism (search results for general contract cases) is sufficient for my other projects, I think it is sufficient for Study Five as well.

Second, the common law of contracts in textualist states is generally classical in nature.³⁰⁸ But most provisions in Article 2 reflect the modern approach to contract law.³⁰⁹ Accordingly, using general contract litigation in the denominator reintroduces a problem that also applies to Studies One and Four: the distortive effect of variations in contract law beyond the subject of interpretation.³¹⁰ Suppose that modern doctrines tend to result in more litigation than classical rules.³¹¹ This would lower the ratio of UCC interpretation decisions to UCC contract decisions in the textualist states vis-à-vis the common law ratio, undermining the comparison of the two. However, this challenge is no more severe here than in Studies One and Four, and thus this concern is not disqualifying.

Third, employing only the Sales key numbers to collect UCC interpretation decisions might result in critical under-coding bias. That is because a significant fraction of judicial opinions addressing contract interpretation under the Code contain interpretation-related key numbers exclusively from Customs and Usages (topic 113).³¹² And Customs and Usages key numbers cannot be included in Westlaw searches for Article 2 interpretation cases because that topic is used to classify decisions applying both the UCC and the common law.³¹³ But the potential bias from under-coding is likely no greater a problem for Study Five than for Studies One, Two, and Four. Therefore, this weakness does not preclude completing Study Five.

Fourth, one of the general weaknesses of the Key Number System is that West's staff do not always code opinions accurately. Sometimes

308. See *supra* note 297 and accompanying text.

309. *Moolenaar v. Co-Build Cos.*, 354 F. Supp. 980, 984 (D.V.I. 1973) (observing that Article 2 of the UCC illustrates "the approach of the modern law, with its emphasis on reasonable commercial dealings and its rejection of technical requirements").

310. See Silverstein, *supra* note 12, at 302-03; *supra* notes 295-302 and accompanying text.

311. See *supra* note 299 and accompanying text.

312. This conclusion is based on (1) a manual review of nearly 100 cases tagged with interpretation-related key numbers from Customs and Usages, and (2) the results returned by multiple Westlaw searches. See also WEST'S ANALYSIS OF AMERICAN LAW, *supra* note 109, at 562-63 (setting forth the Customs and Usages key numbers).

313. This conclusion is based on the same manual review of cases tagged with Customs and Usage key numbers discussed in the immediately prior footnote.

they classify a headnote with the wrong key number. Study Five presented an interesting example of this problem. The Sales key numbers in topic 343 are supposed to be used only to categorize headnotes that concern Article 2 of the UCC.³¹⁴ Despite this, I found several decisions with topic 343 key numbers that contained no reference to Article 2 and instead involved the sale of a business rather than the transfer of goods.³¹⁵ In fairness, some of these lawsuits concerned asset purchase agreements—to which Article 2 often applies.³¹⁶ But a number of the opinions with Sales key numbers involved contracts that are plainly outside the scope of the Code.³¹⁷ Based on a quick review of the caselaw, I do not think that this problem is disqualifying for Study Five. However, I did not thoroughly analyze the issue because the fifth weakness, discussed next, is indeed fatal to the project, making this classification issue moot.

Fifth and last, the decisional law on contract interpretation in textualist states does not vary sufficiently between the UCC and the common law to make an empirical comparison of the two valuable. This is so for three reasons. First, at best, courts generally apply a limited version of contextualism when construing agreements that fall under the UCC. Second, at worst, courts often explicitly or effectively utilize textualism when interpreting contracts governed by the Code. Third, the common law rules of interpretation in textualist states frequently include exceptions to the four-corners rule that move the law in a contextualist direction. Given these three points, UCC contextualism and common law textualism are far more alike in practice in textualist states than contextualism and textualism are in their ideal forms.

This weakness invalidates Study Five. And thus, I decided not to complete the project. But the similarities between the UCC and the

314. WEST'S ANALYSIS OF AMERICAN LAW, *supra* note 109, at 1497 ("Subjects Included[:] Transfers of ownership of personal property . . . for a price in money or its equivalent.").

315. See, e.g., *Rachal v. Luzader*, 927 So. 2d 1286, 1286-87 (La. Ct. App. 2006); *Metro Ventures, LLC v. GEA Assocs.*, 688 N.W.2d 722, 723-24 (Wis. Ct. App. 2004).

316. See *Morgan Publ'ns, Inc. v. Squire Publishers, Inc.*, 26 S.W.3d 164, 167, 173-75 (Mo. Ct. App. 2000) (summarizing the caselaw regarding when Article 2 of the UCC governs the sale of a business conducted via an asset purchase agreement) (involving a contract for the sale of an ongoing newspaper business; holding that while goods of considerable value would be transferred under the contract, the predominate purpose of the agreement was not for the sale of goods, and thus Article 2 did not apply to the transaction).

317. See, e.g., *Metro Ventures*, 688 N.W.2d at 724, 726-27 (agreement for the sale of a business, primarily engaged in owning and operating a building and a parking garage; appearing to apply Wisconsin common law and failing to cite the UCC); *Dierker Assocs., D.C., P.C v. Gillis*, 859 S.W.2d 737, 738-39, 741 (Mo. Ct. App. 1993) (agreement for the sale of a chiropractic clinic; the bulk of the purchase price was for the business itself, with a small additional sum set for equipment).

common law warrant exposition here because various aspects of those similarities have received only cursory treatment in the secondary literature and caselaw. Accordingly, the sub-parts below address in greater detail the three reasons why UCC contextualism and common law textualism are not sufficiently different in practice in textualist jurisdictions to justify the completion of Study Five.

1. Partial Contextualism Under the Uniform Commercial Code

The language of the UCC can be read to support either of two distinct versions of contextualism. I shall call these versions “full contextualism” and “partial contextualism.” Under full contextualism, the judge must consider *all* relevant extrinsic evidence in deciding whether a contract is ambiguous during the first stage of the interpretive process. Partial contextualism, as the name suggests, is narrower. According to this approach, at stage one, the UCC only mandates that courts review the text of the contract and evidence relating to what I will label the “incorporation tools”³¹⁸—course of performance, course of dealing, and usage of trade.³¹⁹ Other types of extrinsic evidence are governed by the general law of contracts (typically common law), and thus their role varies from state to state. If the Code endorses partial contextualism, then a court located in a jurisdiction with *textualist* common law may only consider the express terms and the incorporation tools in deciding whether an agreement is ambiguous. That is because (i) the Code requires that the judge review the incorporation tools, and (ii) supplemental principles of common law bar the judge from receiving any other categories of extrinsic evidence, such as preliminary negotiations. The additional classes of evidence are excluded unless and until the case reaches stage two—resolving the ambiguity. If the court is located in a state with *contextualist* common law, by contrast, then partial contextualism obligates the judge to examine *all* extrinsic evidence in making the ambiguity determination. That is because (i) the Code requires review of the incorporation tools, and (ii) the common law requires that the court consider the remaining types of evidence.

318. I derive this phrase from the secondary literature analyzing the UCC. *See, e.g.,* Lisa Bernstein, *Custom in the Courts*, 110 NW. U. L. REV. 63, 63 (2015) (explaining that the UCC employs an “incorporation strategy—the interpretive approach that directs courts to look to course of dealing, course of performance, and usage of trade to interpret contracts and fill contractual gaps”).

319. A “course of performance” is essentially the parties’ conduct in performance of the contract at issue. *See* U.C.C. § 1-303(a) (2001). A “course of dealing” is the parties’ conduct under prior contracts between them. *Id.* § 1-303(b). And a “usage of trade” is a practice or method of dealing in the industry or location where the parties operate that the parties should know about and should expect to be followed with respect to the contract at issue. *Id.* § 1-303(c).

As noted above, the Code contains language that is consistent with both full contextualism and partial contextualism. Starting with partial contextualism, support for that approach can be found in the provisions that (1) explicate the role of course of performance, course of dealing, and usage of trade, and (2) set out Article 2's parol evidence rule. The two relevant statutes are sections 1-303 and 2-202.³²⁰

Section 1-303 provides that the incorporation tools may be used to interpret, supplement, and even "qualify" the express terms of an agreement.³²¹ The statute also states that the express terms and the incorporation tools "must be construed whenever reasonable as consistent with each other."³²² However, "[i]f such construction is unreasonable: . . . express terms prevail over course of performance, course of dealing, and usage of trade."³²³

Section 2-202 begins by setting out the contradiction prong of the parol evidence rule: "Terms . . . which are . . . set forth in a writing intended by the parties as a final expression of their agreement . . . may not be contradicted by evidence of any prior agreement or of a contemporaneous oral agreement"³²⁴ The statute then provides that a final writing may be explained or supplemented

- (a) by course of performance, course of dealing, or usage of trade . . . ;
and
- (b) by evidence of consistent additional terms unless the court finds the writing to have been intended also as a complete and exclusive statement of the terms of the agreement.³²⁵

In addition, official comment 1(c) to section 2-202 explains that this law "definitely rejects: . . . [t]he requirement that a condition precedent to the admissibility of the type of evidence specified in paragraph (a) [the incorporation tools] is an original determination by the court that the language used is ambiguous."³²⁶

Three arguments in favor of partial contextualism can be derived from these pieces of sections 1-303 and 2-202. First, comment 1(c) to

320. *See id.* §§ 1-303, 2-202.

321. *Id.* § 1-303(d) ("A course of performance or course of dealing between the parties or usage of trade . . . is relevant in ascertaining the meaning of the parties' agreement, may give particular meaning to specific terms of the agreement, and may supplement or qualify the terms of the agreement.").

322. *Id.* § 1-303(e).

323. *Id.* § 1-303(e)(1). The statute further provides that, among the incorporation tools, the order of priority is (i) course of performance, (ii) course of dealing, and (iii) usage of trade. *Id.* §§ 1-303(e)(2), (3).

324. *Id.* § 2-202.

325. *Id.* §§ 2-202(a), (b).

326. *Id.* § 2-202, cmt. 1(c).

section 2-202 specifically exempts course of performance, course of dealing, and usage of trade from application of the four-corners rule—the requirement that contractual language be facially ambiguous before the court may consider extrinsic evidence.³²⁷ But the comment says nothing about whether other types of extrinsic evidence are subject to a patent ambiguity requirement.³²⁸ Accordingly, given the canon *expressio unius est exclusio alterius*,³²⁹ the exemption should not extend beyond the incorporation tools.³³⁰

Second, the statutory language of section 1-303 discusses only course of performance, course of dealing, and usage of trade.³³¹ The provision contains no references to alternative forms of extrinsic evidence.³³² Section 2-202 also limits its discussion of interpretation to the incorporation tools,³³³ though it does address other evidence when setting forth the parol evidence rule limitations on contradiction and supplementation.³³⁴ This means that the two principal sections of the

327. *Id.*

328. WILLIAM D. HAWKLAND & LINDA J. RUSCH, 1 HAWKLAND UNIFORM COMMERCIAL CODE SERIES § 2-202:1, at 2-167 to 2-168 (Frederick H. Miller ed. 2014) (“While the official comment to Section 2-202 provides that demonstrating a term is ambiguous is not a prerequisite for admission of evidence of course of dealing, usage of trade, or course of performance, whether ambiguity should be a prerequisite to other types of evidence being admitted to determine the meaning of the written terms is not addressed in the text or comments of Section 2-202.”).

329. 73 AM. JUR. 2D *Statutes* § 120 (2018) (“Under the general rule of statutory construction *expressio unius est exclusio alterius*, the expression of one or more items of a class implies that those not identified are to be excluded.”).

330. Keep in mind, however, that courts generally view the official comments as constituting merely persuasive authority, rather than binding authority. *See, e.g.*, *Blue Valley Coop. v. Nat'l Farmers Org.*, 600 N.W.2d 786, 792 (Neb. 1999); *Volvo Commercial Fin., L.L.C. v. Wells Fargo Bank, N.A.*, 163 P.3d 723, 727 (Utah Ct. App. 2007); *see also* LARRY LAWRENCE, 1B LAWRENCE'S ANDERSON ON THE UNIFORM COMMERCIAL CODE § 1-103:34 [Rev], at 53-54 (3d ed. 2012) (“The Official Comments are persuasive, although not controlling authority, and provide guidance in interpreting the UCC.”).

331. U.C.C. § 1-303.

332. *See id.*

333. *See id.* § 2-202.

334. *See id.* § 2-202(b); *see also* 2 HAWKLAND & RUSCH, *supra* note 328, § 2-202:1, at 2-167 (“The parol evidence rule as expressed in Article 2 does not directly address the question of whether other types of evidence (other than course of dealing, usage of trade, course of performance, or consistent additional terms) can be admitted to determine the meaning of the written terms.”). In fairness, note that section 2-202 provides that a final writing may be “*explained or supplemented . . . by evidence of consistent additional terms . . .*” U.C.C. § 2-202(b) (emphasis added). This suggests that the statute *does* regulate the role of evidence beyond the incorporation tools in the process of interpretation. But since section 2-202(b) states that such evidence may not be considered when the parties have executed a completely integrated agreement, *id.*, the better reading of the statute is that the discussion of consistent additional terms in subsection (b) is concerned only with supplementation, not explanation (i.e., interpretation). After all, the very concept of “consistent additional terms” speaks to including *separate* terms in the contract, not interpreting those already written down. Moreover, if an agreement is ambiguous, then the court may review every type of extrinsic evidence to resolve the ambiguity regardless of whether the

Code concerned with contract interpretation are silent on the interpretive role of extrinsic evidence beyond the incorporation tools. Accordingly, that role is governed by general rules of contract law.

To elaborate, the UCC was not intended to displace all prior law governing commercial transactions.³³⁵ Instead, “it was drafted against the backdrop of existing bodies of law, including the common law and equity, and relies on those bodies of law to supplement it [sic] provisions in many important ways.”³³⁶ Put another way, for numerous subjects, the UCC does not prescribe an exhaustive set of rules.³³⁷ Instead, the Code only contains a limited group of standards designed to implement particular policies, and, in section 1-103(b), directs courts to fill the gaps with bodies of law beyond the UCC, namely the common law and other commercial statutes.³³⁸

The Code adopts this approach with respect to contract interpretation and the parol evidence rule. Sections 1-303 and 2-202 are not comprehensive provisions. They address only selected aspects of interpretation and parol evidence.³³⁹ As a result, courts must employ general principles of contract interpretation derived primarily from the common law when construing agreements governed by the UCC.³⁴⁰ For example, the canons of construction, such as construe against the drafter, supplement the Code,³⁴¹ as do the various exceptions to the parol

contract is set forth in a complete integration. Thus, since section 2-202(b) conditions the admissibility of consistent additional terms evidence on whether the parties have written “a complete and exclusive statement of the terms of the agreement,” *id.*, the provision, properly understood, is about the parol evidence rule concept of supplementation rather than interpretation.

335. 1B LAWRENCE, *supra* note 330, § 1-103:208 [Rev], at 130-31.

336. U.C.C. § 1-103, cmt. 2.

337. See 1B LAWRENCE, *supra* note 330, § 1-103:3 [Rev], at 41.

338. U.C.C. § 1-103(b) (“Unless displaced by the particular provisions of [the UCC,] the principles of law and equity . . . supplements its provisions.”); *id.* § 1-103, cmts. 2, 3. See generally 1B LAWRENCE, *supra* note 330, §§ 1-103:231 to 1-303:551 [Rev], at 142-257 (discussing the numerous bodies of law that supplement the UCC).

339. See JOSEPH M. PERILLO, CALAMARI AND PERILLO ON CONTRACTS § 3.12, at 135 (6th ed. 2009) (observing that “the UCC has very little to say about interpretation”).

340. 1B LAWRENCE, *supra* note 330, § 1-103:294 [Rev], at 164 (“Nothing in the UCC displaces the general principles governing the interpretation of contracts, except as particular sections of the UCC may produce a result that would be inconsistent with the ordinary contract law result.”); *id.* § 1-103:415 [Rev], at 210-11 (“Except as partly modified by the provision relating to sales contracts and contracts for leasing goods, the UCC does not displace the parol evidence rule When the UCC makes no provision as to the admissibility of parol evidence, the court must look to the non-UCC law.”); see, e.g., *Travis Bank & Tr. v. State*, 660 S.W.2d 851, 855 (Tex. App. 1983) (explaining that general principles of contract interpretation apply to letters of credit governed by Article 5 of the UCC).

341. Jody S. Kraus & Steven D. Walt, *In Defense of the Incorporation Strategy*, in THE JURISPRUDENTIAL FOUNDATIONS OF CORPORATE AND COMMERCIAL LAW 193, 220 (Jody S. Kraus & Steven D. Walt eds., 2000); see, e.g., *Snelten v. Schmidt Implement Co.*, 647 N.E.2d 1071, 1074-75 (Ill. App. Ct. 1995) (applying the canon that specific contractual language controls general

evidence rule, like the fraud exception.³⁴² The standards governing the role of extrinsic evidence other than the incorporation tools—i.e., the rules of textualism and contextualism—are no different. Thus, they also supplement the UCC and apply to contracts subject to the Code.

Third, the incorporation tools are exempted from the supplementation prong of the parol evidence rule. Under the Code, as under the common law, the general rule is that evidence of consistent additional terms is admissible only when the parties have not expressed their agreement in a completely integrated writing.³⁴³ But this limitation does not apply to course of performance, course of dealing, and usage of trade. Under the UCC, the incorporation tools may add consistent terms to a contract even when the parties have executed a complete integration.³⁴⁴ This means that a merger clause does not bar the court from examining these elements for purposes of supplementing an agreement.³⁴⁵ Instead, evidence of course of performance, course of dealing, or usage of trade is excluded from consideration only when “carefully negated” in the parties’ written contract.³⁴⁶ The privilege

language to an agreement governed by Article 2); *Berry v. Lucas*, 150 P.3d 424, 426-27 (Or. Ct. App. 2006) (applying construe against the drafter in a case governed by Article 2 of the UCC).

342. 1 WHITE ET AL., *UNIFORM COMMERCIAL CODE* § 3:15, at 244 (2012).

343. U.C.C. § 2-202 (“Terms . . . set forth in a writing intended by the parties as a final expression of their agreement with respect to such terms as are included therein . . . may be . . . supplemented . . . (b) by evidence of consistent additional terms *unless* the courts finds the writing to have been intended also as a *complete and exclusive* statement of the terms of the agreement.”) (emphasis added); *RESTATEMENT (SECOND) OF CONTRACTS* § 213(2) (AM. LAW INST. 1981) (setting forth the same rule under the common law).

344. Section 2-202 provides as follows: “Terms . . . set forth in a writing intended by the parties as a final expression of their agreement with respect to such terms as are included therein . . . may be . . . supplemented (a) by course of performance, course of dealing, or usage of trade; . . .” U.C.C. § 2-202. By leaving out the “complete and exclusive statement” limitation contained in section 2-202(b), the intent of section 2-202(a) is clearly to exempt the incorporation tools from the restriction applicable to other evidence of consistent additional terms. *See id.*; JOHN EDWARD MURRAY, JR., *MURRAY ON CONTRACTS* § 85[C][6], at 438 (5th ed. 2011) (“If the parties intended their writing to be not merely *final* but also a *complete and exclusive* statement of the terms of their agreement, evidence of consistent additional terms is excluded, but even with respect to such a complete and exclusive expression of agreement, evidence of trade usage, course of dealing, and course of performance is admissible.”); PERILLO, *supra* note 339, § 3.4(e)(2), at 118 (“Thus, under this rule [in 2-202(a)], even a total integration is treated as if it were a partial integration in relation to this triad of evidence [i.e., the incorporation tools]”); *see also* 1 WHITE ET AL., *supra* note 342, § 3:14, at 238-239 & n.53 (collecting numerous case authorities endorsing this understanding).

345. 1 WHITE ET AL., *supra* note 342, § 3:16, at 247; *id.* § 4.3, at 276.

346. U.C.C. § 2-202 cmt. 2 (explaining that course of performance, course of dealing, and usage of trade “become an element of the meaning of the words used” in an agreement “[u]nless carefully negated”). It is not clear what constitutes “careful negation.” A specific clause disclaiming a particular usage of trade, course of dealing, or course of performance should be sufficient. *Kirst, supra* note 64, at 865. But a broad clause simply stating that the incorporation tools are “ineffective to explain, supplement, vary, or modify the contract” might not be. *Compare S. Concrete Servs., Inc. v. Mableton Contractors, Inc.*, 407 F. Supp. 581, 584 (N.D. Ga. 1975) (“The court recognizes

conferred upon the incorporation tools highlights the importance of these concepts to the structure and policies of the Code. Since the UCC provides for different treatment of course of performance, course of dealing, and usage of trade for purposes of adding to an agreement, it is reasonable to construe the Code as also providing for different treatment of these categories for purposes of interpretation. In other words, because only the incorporation tools are exempted from the supplementation prong of the parol evidence rule, it is plausible to believe that only the incorporation tools are exempted from the four-corners rule, as set out in comment 1(c) to section 2-202.³⁴⁷

Turning to the case for full contextualism, that position is most strongly supported by the UCC's definition of "agreement," which is set out in section 1-201(b)(3): "Agreement" . . . means the bargain of the parties in fact, as found in their language or inferred from other circumstances, *including* course of performance, course of dealing, or usage of trade"³⁴⁸ Because the code employs the word "including," an agreement appears to be constituted by the written text, the incorporation tools, *and* other aspects of the commercial context.³⁴⁹ The

that all ambiguity as to the applicability of trade usage could be eliminated by a blanket condition that the express terms of the contract are in no way to be modified by custom, usage, or prior dealings."), *and* *Madison Indus., Inc. v. Eastman Kodak Co.*, 581 A.2d 85, 90 (N.J. Super. Ct. App. Div. 1990) (explaining in dicta that the court would have enforced a general provision barring all incorporation tools evidence had the UCC governed the contract at issue), *with* *Kirst*, *supra*, at 865-67 (arguing that general boilerplate language purporting to negate the effect of course of dealing or usage of trade should not be dispositive; if the parties continue to follow a given usage or course of dealing despite a boilerplate exclusion, then evidence of the incorporation tools is admissible in any later dispute over the particular usage or course of dealing). *See also* *Bernstein*, *supra* note 318, at 71 (observing that "the enforceability and effectiveness of a general clause opting out of all trade usages is at best unclear").

347. There is a fourth argument in favor of partial contextualism that is closely related to the third. Some commentators believe that section 2-202 exempts course of performance, course of dealing, and usage of trade from the *contradiction* prong of the parol evidence rule as well. *See, e.g.*, 2 LAWRENCE, *supra* note 330, § 2-202:168, at 656 ("By separately covering course of dealing, usage of trade and course of performance in U.C.C. § 2-202(a), the Code makes it clear that the limitation found in U.C.C. § 2-202(b) as to the admission of additional terms to those that are *consistent* with the writing does not apply to course of dealing, usage of trade or course of performance.") (emphasis added). This means that the incorporation tools may override, at least in part, the express terms of a written contract, while other types of extrinsic evidence may not. If accurate, this further supports the conclusion that course of performance, course of dealing, and usage of trade should receive differential treatment at stage one of the interpretive process. However, I consigned this argument to a footnote because the claim that the incorporation tools are exempt from the contradiction limitation of the parol evidence rule is considerably more debatable than is the proposition that they are exempt from the supplementation limitation. *See infra* Part V.D.2.

348. U.C.C. § 1-201(b)(3) (emphasis added).

349. "The word 'includes' is usually a term of enlargement, and not of limitation. . . . It, therefore, conveys the conclusion that there are other items includable, though not specifically enumerated" 2A NORMAN J. SINGER & J.D. SAMBIE SINGER, SUTHERLAND STATUTORY

official comment expressly endorses this construction by stating that the word agreement “is intended to include full recognition of usage of trade, course of dealing, course of performance *and the surrounding circumstances* as effective parts thereof”³⁵⁰ Since—by statutory fiat—both the incorporation tools and other aspects of the commercial context are equal parts of an agreement, they should play the same role in the construction of contracts. And thus, every type of extrinsic evidence ought to be examined by the court at both stages of the interpretive process.³⁵¹ Indeed, because the Code considers all of the surrounding circumstances to be elements of an agreement, evidence of those circumstances can be thought of as concerning subjects that are *intrinsic* to a contract.³⁵² Accordingly, it is a conceptual mistake to even refer to such evidence as “extrinsic.”

If correct, this understanding of section 1-201(b)(3) creates problems for the partial contextualism arguments based on sections 1-303 and 2-202. First, those arguments are generally premised on the claim that the Code is silent regarding categories of extrinsic evidence other than the incorporation tools.³⁵³ But that is not true. Section 1-201(b)(3) addresses the other categories when it states that aspects of the commercial context beyond the incorporation tools are constituting elements of a contract.³⁵⁴ Second, the logic of section 1-201(b)(3) leads to the conclusion that all aspects of the surrounding circumstances are admissible at both stages of the interpretive process under the Code. That contradicts the principles of textualism. Therefore, those principles may not supplement the UCC because, pursuant to section 1-103, a

CONSTRUCTION § 47.7, at 310 (7th ed. 2014).

350. U.C.C. § 1-201, cmt. 3 (emphasis added).

351. Professor John M. Breen explains the point this way when discussing the incorporation tools:

First, the definition of agreement under section 1-201(b)(3) makes evidence of usage of trade, course of dealing, and course of performance necessarily relevant and presumptively admissible. Because these sources of contextual evidence are “effective parts” of the agreement itself, they cannot be excluded by other evidence of the same agreement. Instead, if an apparent conflict exists between the contextual evidence presented and the written terms of the agreement, then the question to be resolved is a question of determining [the parties’] intent from oral and written evidence.

John M. Breen, *Statutory Interpretation and the Lessons of Llewellyn*, 33 LOY. L.A. L. REV. 263, 335 (2000) (quoting U.C.C. § 1-201, cmt. 3) (other internal quotation marks omitted). Likewise, if categories of evidence beyond the incorporation tools are “effective parts” of a contract governed by the Code, see U.C.C. § 1-201, cmt. 3, then they too are “presumptively admissible” at both stages of the interpretive process.

352. See Breen, *supra* note 351, at 328 (explaining that the Code regards the incorporation tools to be “*intrinsic* to the agreement itself”) (emphasis in original).

353. See *supra* notes 332-42 and accompanying text.

354. U.C.C. § 1-201(b)(3).

legal rule is barred from serving as a gap filler if it is inconsistent with the Code.³⁵⁵

An additional basis for construing the UCC as adopting full contextualism can be found in comment 1 to section 1-303. This comment provides that “the meaning of the agreement of the parties is to be determined by the language used by them and by their action, read and interpreted in the light of commercial practices and other surrounding circumstances.”³⁵⁶ While vague, the phrase “commercial practices and other surrounding circumstances” could be understood as referring to types of evidence beyond the incorporation tools. The comment is thus treating the incorporations tools, which are exempt from the four-corners rule, and other types of extrinsic evidence as equals.³⁵⁷

A defender of partial contextualism could reply as follows. First, if the definition of agreement establishes that all types of extrinsic evidence are to be treated the same for purposes of interpretation, then why do other parts of the Code treat them differently? In particular, why does the statutory language of section 1-303 adopt rules for only the incorporation tools?³⁵⁸ And why does comment 1(c) to section 2-202

355. *Id.* § 1-103(b) (“Unless displaced by the particular provisions of [the UCC], the principles of law and equity . . . supplements its provisions.”) (emphasis added); *id.* § 1-103, cmt. 2 (providing that “the Uniform Commercial Code preempts principles of common law and equity that are inconsistent with either its provisions or its purposes and policies”) (emphasis added).

356. U.C.C. § 1-303, cmt. 1.

357. A brief note about section 2-202, comment 1(b) is in order. This comment provides that section 2-202 “definitely rejects: . . . (b) [t]he premise that the language used has the meaning attributable to such language by the rules of construction existing in the law rather than the meaning which arises out of the commercial context in which it is used” U.C.C. § 2-202, cmt. 1. Some scholars believe that this comment rejects the plain meaning rule in full. *See, e.g.,* Mark P. Gergen, *The Jury’s Role in Deciding Normative Issues in the American Common Law*, 68 FORDHAM L. REV. 407, 444 n.172 (1999) (stating that section 2-202, cmt. 1(b) rejects the plain meaning rule); John E. Murray, Jr., *Contract Theories and the Rise of Neoformalism*, 71 FORDHAM L. REV. 869, 882 & n.64 (2002) (citing section 2-202, comment 1(b) for the proposition that the UCC emasculates the plain meaning rule). That would mean that comment 1(b) endorses full contextualism. But I am skeptical of this reading of the comment. First, if comment 1(b) rejects textualism, then there would be no need for comment 1(c), which exempts the incorporation tools from the textualist plain meaning rule. *See* MARGARET N. KNIFFIN, 5 CORBIN ON CONTRACTS § 24.17, at 170 (Joseph M. Perillo ed., rev. ed. 1998) (citing comment 1(c) for the proposition that the incorporation tools are exempted from the plain meaning rule); David G. Epstein et al., *FIFTY: Shades of Grey—Uncertainty About Extrinsic Evidence and Parol Evidence After All These UCC Years*, 45 ARIZ. ST. L.J. 925, 941 (2013) (“Official Comment 1(c) to UCC § 2-202 expressly rejects the plain meaning rule.”). Second, some of the canons of construction only apply at stage two of the interpretive process. As a result, the reference to “rules of construction” suggests that comment 1(b) is concerned with the resolution of ambiguity, not the ambiguity determination. Given these two points, comment 1(b) provides, at best, only weak support for the proposition that the UCC adopts full contextualism.

358. *See* U.C.C. § 1-303.

exempt only the incorporation tools from the patent ambiguity requirement?³⁵⁹ Second, sections 1-303 and 2-202 set out specific rules governing the use of extrinsic evidence to interpret, contradict, or add to a written contract.³⁶⁰ Section 1-201(b)(3), by contrast, is a general statute that does not directly address the use of evidence for any of those purposes.³⁶¹ Accordingly, to the extent these laws are inconsistent, the definition statute must give way to the provisions setting forth operative standards.³⁶²

359. See *id.* § 2-202, cmt. 1(c).

360. See *id.* §§ 1-303, 2-202.

361. See *id.* § 1-201(b)(3).

362. See *Morales v. Trans World Airlines, Inc.*, 504 U.S. 374, 384 (1992) (“But it is a commonplace of statutory construction that the specific governs the general . . .”).

Note that when Article 2 of the UCC was revised in 2003, the drafters proposed three important changes to section 2-202 that concern the role of extrinsic evidence in deciding whether a contract is ambiguous. First, they elevated the incorporation tools’ exemption from the four-corners rule from a comment to the body of the statute: “Terms in a record may be explained by evidence of course of performance, course of dealing, or usage of trade without a preliminary determination by the court that the language used is ambiguous.” U.C.C. § 2-202(2) (AM. LAW INST. & UNIF. LAW COMM’N, Proposed Draft 2002). Second, the drafters deleted the language from comment (1)(b). Compare *id.* § 2-202 cmts. 1-5, with U.C.C. § 2-202 cmt. 1(b). Recall that some commentators have read that comment as overturning the plain meaning rule and adopting full contextualism. See sources cited *supra* note 357. Third, the drafters added a new comment expressly endorsing partial contextualism:

Issues of interpretation are generally left to the courts. In interpreting terms in a record, subsection (2) permits either party to introduce evidence drawn from a course of performance, a course of dealing, or a usage of trade without any preliminary determination by the court that the term at issue is ambiguous. *This article takes no position on whether a preliminary determination of ambiguity is a condition to the admissibility of evidence drawn from any other source* or on whether a contract clause can exclude an otherwise applicable implied-in-fact source.

U.C.C. § 2-202 (AM. LAW INST. & UNIF. LAW COMM’N, Proposed Draft 2002), cmt. 6 (emphasis added). While the National Conference of Commissioners on Uniform State Laws (“NCCUSL”) and the American Law Institute ultimately withdrew Revised Article 2 after no state adopted it, 1 HAWKLAND & RUSCH, *supra* note 328, § 2-202:6, at 2-189, these amendments might shed light on the best reading of the current version of the Code.

For example, one could interpret the changes to section 2-202 as serving only to make clear that the UCC already embraces partial contextualism. Cf. Henry Deeb Gabriel, *The 2003 Amendments of Article Two of the Uniform Commercial Code: Eight Years or a Lifetime After Completion*, 52 S. TEX. L. REV. 487, 501-02 (2011) (describing the amendments to section 2-202 as constituting a “clarifying change”). This understanding is supported by the fact that the sole substantive alteration to the text of the provision was the addition of language previously in the comment. Alternatively, one could construe the three amendments as constituting a break from prior law. After all, since comments are merely persuasive authority and the statutory text is binding, moving language from the former into the latter might be a significant change.

Ultimately, arguments like those in the prior paragraph possess little force. As noted previously, Revised Article 2 was withdrawn by NCCUSL and the American Law Institute. And more importantly, the revision drafters’ understanding of section 2-202 has minimal bearing on the statute’s meaning because the law was drafted decades before the revision process began.

As a matter of statutory interpretation, the consensus among commentators is that the UCC adopts full contextualism.³⁶³ But the secondary literature also recognizes that courts favor partial contextualism over full contextualism.³⁶⁴ And I have come to the same conclusion based on my own research: Partial contextualism is the dominant approach to the Code in the decisional law.³⁶⁵

In a textualist state, a court applying partial contextualism under the UCC must exclude everything but the text and the incorporation tools

363. See, e.g., BURTON, *supra* note 1, at 140-41 ("The UCC also does not require a finding of ambiguity before allowing extrinsic evidence of a contract's commercial context—*primarily*, course of performance, course of dealing, and usage of trade.") (emphasis added); LINZER, *supra* note 58, § 25.5 at 49 ("Why negotiations and preliminary exchanges of information are to be treated differently than the parties' practice and the practices of their trade is not explained and is inconsistent with the overall approach of the Code and with Karl Llewellyn's view of the parol evidence rule. . . . Article 2 should be applied identically to the Restatement (Second)'s broad contextual approach, and not be constricted artificially."); *id.* § 25.13 at 146-47 & n.3; Robert E. Scott, *The Rise and Fall of Article 2*, 62 LA. L. REV. 1009, 1038-39 (2002) ("Rather, Article 2 explicitly invites incorporation by defining the content of an agreement to include trade usage, prior dealings and the parties experiences in forming the contract. . . . The invitation to contextualize the contract in this manner is explicitly embodied in the Code's definition of agreement. . . .") (emphasis added). But see Amy H. Kastely, *Stock Equipment for the Bargain in Fact: Trade Usage, "Express Terms," and Consistency Under Section 1-205 of the Uniform Commercial Code*, 64 N.C. L. REV. 777, 787 n.65 (1986) ("In effect, the Code gives priority to written terms with respect to evidence of prior negotiations or agreement but not with respect to evidence of trade usage.").

364. See, e.g., 1B LAWRENCE, *supra* note 330, § 1-303:22 [Rev], at 606 ("The evidence of course of performance may show that the contract terms were ambiguous. That determination, when made, will then permit the admission of parol evidence to establish the meaning of the contract."); 1 WHITE ET AL., *supra* note 342, § 3:14, at 221-22 ("Most courts require that the terms to be interpreted be ambiguous or otherwise unclear on its [sic] face though 2-202 does not so provide"); 32A C.J.S. *Evidence* § 1501 ("If the contract provision appears ambiguous after evidence of course of dealing, usage of trade, and course of performance has been admitted, other extrinsic evidence may then be admitted as well.").

365. Cases from textualist states that endorse partial contextualism under the Code come in two forms. First, some expressly adopt partial contextualism, explaining that judges should consider only the text, course of performance, course of dealing, and usage of trade during the first stage of the interpretive process. See, e.g., *Paragon Resources, Inc. v. Nat. Fuel Gas Distrib. Corp.*, 695 F.2d 991, 995-96 (5th Cir. 1983) (applying New York law) (*Paragon Resources* is probably the leading case endorsing partial contextualism under the Code); *J. Lee Milligan, Inc. v. CIC Frontier, Inc.*, 289 Fed. Appx. 786, 789-90 & n.4 (5th Cir. 2008) (applying Oklahoma law); *Walk-In Med. Ctrs., Inc. v. Breuer Capital Corp.*, 818 F.2d 260, 264-65 (2d Cir. 1987) (applying New York law); *Chase Manhattan Bank v. First Marion Bank*, 437 F.2d 1040, 1046-48 (5th Cir. 1971) (applying New York law); *Dawn Enters. v. Luna*, 399 N.W.2d 303, 306 n.3 (N.D. 1987); see also *Mohave Valley Irrigation & Drainage Dist. v. Norton*, 244 F.3d 1164, 1165-66 (9th Cir. 2001) (construing the UCC as a source of federal common law). Second, other decisions simply focus solely on the four corners of the contract at stage one when no incorporation tools evidence is implicated. See, e.g., *W. Dermatology Consultants, P.C. v. Vitalworks, Inc.*, 78 A.3d 167, 181, 183 (Conn. App. Ct. 2013); *Shields Pork Plus, Inc. v. Swiss Valley Ag Serv.*, 767 N.E.2d 945, 949-51 (Ill. App. Ct. 2002); *Harper v. Calvert*, 687 S.W.2d 227, 230 (Mo. Ct. App. 1984). But note that some opinions in the latter group might have applied the plain meaning rule even if one party had submitted evidence regarding the incorporation tools. See *infra* notes 391-96 and accompanying text.

from the ambiguity determination. Most importantly, oral and written evidence regarding preliminary negotiations plays no role at stage one of the interpretive process. This means that the only difference between textualism and partial contextualism in such a jurisdiction is the role of the incorporation tools when deciding if a contract is ambiguous. However, course of performance, course of dealing, and usage of trade are extremely important types of evidence.³⁶⁶ As a result, an empirical study comparing litigation under the Code's partial contextualism to litigation under the common law's textualism would probably still possess considerable value. Thus, I would have completed Study Five if the dominance of partial contextualism over full contextualism were the only problem with the caselaw. But as I noted above, there are two additional problems.

2. Quasi-Textualism Under the Uniform Commercial Code

The arguments set forth in the prior section establish that reasonable minds can differ over whether the Code adopts full contextualism or partial contextualism. But given the language of sections 1-201(b)(3), 1-303, and 2-202, there is a compelling case that at least one of those two positions is correct. In other words, at minimum, the UCC appears to embrace a version of contract interpretation that is soundly on the contextualist side of the line. However, numerous reported decisions employ textualist methodologies when construing agreements governed by the Code. These cases create another problem for an empirical study attempting to compare common law textualism with UCC contextualism because they further diminish the practical distinction between those two approaches.

Since most courts reject full contextualism,³⁶⁷ the judicial debate over the role of extrinsic evidence under the Code is focused on the incorporation tools. Commentators generally view the caselaw as endorsing three positions regarding the relationship of express terms to course of performance, course of dealing, and usage of trade.³⁶⁸

366. Kerry Lynn Macintosh, *Liberty, Trade, and the Uniform Commercial Code: When Should Default Rules be Based on Business Practices?*, 38 WM. & MARY L. REV. 1465, 1493 (1997) ("Most importantly, course of dealing, trade usage, and course of performance play important roles within Article 2."); Murray, *supra* note 357, at 881-82 ("Trade usage, course of dealing and course of performance are so important that Article 2 insists that they are necessarily part of any contract and impervious to parol evidence rule excision."); see also E. ALLEN FARNSWORTH, *CONTRACTS* § 7.13, at 469 (4th ed. 2004) ("Such contentions [that a contract should be read in light of the incorporation tools] are especially common in disputes over commercial contracts").

367. See *supra* notes 364-65 and accompanying text.

368. See, e.g., FARNSWORTH, *supra* note 366, § 7.13, at 474-76; Kastely, *supra* note 363, at 782-96.

According to position one, evidence regarding the incorporation tools is always relevant and admissible, even if the submitting party is offering the evidence to support an interpretation or supplemental term that completely overrides an express term of the contract. The classic example is *Columbia Nitrogen Corp. v. Royster Co.*³⁶⁹ There, the parties' written agreement provided that Columbia Nitrogen would purchase a minimum level of phosphate from Royster each year at a set price.³⁷⁰ When phosphate prices plunged, Columbia Nitrogen ordered only a fraction of the contractual minimum.³⁷¹ In Royster's lawsuit for breach, Columbia Nitrogen sought to introduce course of dealing and usage of trade evidence that the express price and quantity terms in their agreement were only projections and that the ultimate price and quantity would be adjusted at the time of sale to take into account prevailing market conditions.³⁷² The trial court barred the evidence, but the Fourth Circuit reversed.³⁷³ The appellate court explained that section 2-202 repealed the plain meaning rule for contracts involving the sale of goods.³⁷⁴ As a result, the existence of a patent ambiguity is not required before a judge may consider evidence regarding the incorporation tools.³⁷⁵ Instead, the relevant inquiry is whether the extrinsic evidence can "be reasonably construed as consistent with the terms of the contract."³⁷⁶ And the court held that Columbia Nitrogen's course of dealing and trade usage submissions were sufficiently consistent with the express quantity and price terms to meet that standard.³⁷⁷

Under position two, evidence concerning the incorporation tools is relevant and admissible when offered in support of an interpretation or supplemental term that, at most, qualifies an express term of the parties' contract. Course of performance, course of dealing, and usage of trade may not be used to completely override one of the express terms. *Nanakuli Paving & Rock Co. v. Shell Oil Co.*³⁷⁸ is the archetype of this approach. Nanakuli, an asphaltic paving contractor, and Shell entered into a contract under which Shell was to supply asphalt to Nanakuli at

369. 451 F.2d 3 (4th Cir. 1971).

370. *Id.* at 6. Actually, there was an escalation clause under which the price could increase. But there was no provision allowing for a decrease in price. *Id.*

371. *Id.* at 7.

372. *Id.* at 7-8.

373. *Id.* at 8, 11.

374. *Id.* at 8.

375. *Id.* at 8-9.

376. *Id.* at 9.

377. *Id.* at 9-10.

378. 664 F.2d 772 (9th Cir. 1981).

“Shell’s Posted Price at the time of delivery.”³⁷⁹ Nanakuli argued that the contract obligated Shell to provide Nanakuli with “price protection.”³⁸⁰ This means that after Shell raised its asphalt price, it was required to continue charging Nanakuli the old price for quantities Nanakuli needed to fulfill its obligations under construction contracts for which Nanakuli had made its bid using Shell’s original price.³⁸¹ When Shell failed to provide such protection after a price increase, Nanakuli sued for breach.³⁸² At trial, Nanakuli submitted both course of performance and trade usage evidence that price protection was a component of the parties’ contract, which the trial court admitted.³⁸³ On appeal, Shell argued that “price protection could not be construed as reasonably consistent with the express price term . . .” providing for sales at Shell’s posted price.³⁸⁴ The Ninth Circuit disagreed, explaining that incorporation tools evidence is admissible when it does not “totally negate” an express term but instead merely qualifies the term.³⁸⁵ Here, including price protection in the contract only created a limited exception to the express provision that Nanakuli must pay Shell’s posted price.³⁸⁶ Most of Shell’s asphalt was indeed sold at the “posted price.”³⁸⁷ Price protection merely mandates that Shell sell to Nanakuli at the *old* posted price rather than the current one for brief periods after a price increase. Thus, price protection only qualifies or “cuts down” the posted price term. It does not completely negate it.³⁸⁸

Note that the Ninth Circuit employed the same standard as the Fourth Circuit in *Columbia Nitrogen*. The *Nanakuli* court held that the incorporation tools evidence was admissible because “the jury could have *reasonably construed* price protection as *consistent* with the express term.”³⁸⁹ The Fourth Circuit used exactly this locution.³⁹⁰ But the Ninth Circuit interpreted “reasonably construed . . . as consistent” in a narrower manner. Under *Columbia Nitrogen*, the incorporation tools may be used to completely negate an express term. Under *Nanakuli*, the incorporation tools may only qualify or limit an express term.

379. *Id.* at 777-78.

380. *Id.* at 778.

381. *Id.* at 777.

382. *Id.*

383. *Id.* at 778 & n.5.

384. *Id.* at 779.

385. *Id.* at 780, 805.

386. *Id.*

387. *See id.* at 785.

388. *Id.* at 780, 805.

389. *Id.* at 780 (emphasis added); *accord id.* at 795 (Incorporation tools evidence is admissible unless it “cannot be reasonably reconciled with the express terms of the contract.”).

390. *See supra* note 376 and accompanying text.

The final position is the most restrictive: evidence relating to the incorporation tools is relevant and admissible only if the evidence is offered to support an interpretation or additional term that does not contradict the express language of the contract.³⁹¹ The cases adopting this position fall into two subgroups. In some, the judge considers the proffered extrinsic evidence when deciding whether an alleged interpretation or supplemental term conflicts with the written provisions. *Southern Concrete Services, Inc. v. Mableton Contractors, Inc.*³⁹² exemplifies this approach. There, the court considered—but rejected as inadmissible—trade usage evidence that the quantity term in a contract for the sale of concrete was not binding on either party.³⁹³ Other decisions employ textualist methodology. In these, the court refuses to review any extrinsic evidence—including evidence relating to the incorporation tools—unless it finds that the contract at issue contains a patent ambiguity. For example, in *Midwest Generation, LLC v. Carbon Processing & Reclamation, LLC*, the court applied the four-corners rule in deciding that an agreement for the sale of oil was unambiguous.³⁹⁴ In the process, the court ignored evidence of industry standards offered by one of the parties.³⁹⁴

Under the *Southern Concrete Services* approach, the judge considers both the express terms and the incorporation tools evidence in determining whether there is a prohibited contradiction. Under a true textualist approach, as reflected in *Midwest Generation*, the judge only reviews the face of the written contract in adjudicating the admissibility of any course of performance, course of dealing, or trade usage evidence. Some courts and commentators argue that this is a crucial difference, and thus that *Southern Concrete Services* and *Midwest Generation* constitute two different approaches to the relationship of

391. 407 F. Supp. 581 (N.D. Ga. 1975) (applying Georgia law).

392. *Id.* at 582-83, 586.

393. *Midwest Generation, LLC v. Carbon Processing & Reclamation, LLC*, 445 F. Supp. 2d 928, 932 (N.D. Ill. 2006).

394. *Id.* at 931-33 (applying Illinois law). Note that a substantial number of cases applying a four-corners approach to contracts governed by the UCC do so without citing to any of the relevant Code provisions and/or rely primarily or exclusively on common law authorities in their analysis. *See, e.g., id.* (doing both of these things); *Fisherman Surgical Instruments, LLC v. Tri-Anim Health Servs., Inc.*, 502 F. Supp. 2d 1170, 1179-80 (D. Kan. 2007) (same); *Cook Composites, Inc. v. Westlake Styrene Corp.*, 15 S.W.3d 124, 131-33 (Tex. App. 2000) (same); *see also* Epstein, *supra* note 357, at 926, 929-30 (“Too often, the reported opinions in post-UCC cases that involve a dispute over interpreting a term in or adding terms to a written contract for the sale of goods do not use the language of the UCC.”). There are many possible explanations for such opinions, including (1) the confusing nature of contract interpretation and the parol evidence rule; (2) poor or strategic advocacy on the part of the litigating attorneys with respect to the interpretation issues; and (3) parties and courts failing to consider choice of law questions, such as whether the common law or the UCC regulates a given agreement.

express terms and the incorporation tools.³⁹⁵ But when courts apply a robust understanding of “contradict”—as is the general practice among the cases following position three—the line between these two approaches breaks down. Let me elaborate.

The notion of a “contradiction” as employed in decisions like *Southern Concrete Services* concerns the conceptual relationship between (a) the express terms and (b) the meaning or supplemental term advanced by the party seeking to introduce evidence of the incorporation tools. That relationship is not dependent on the content or weight of the evidence reflecting any course of performance, course of dealing, or usage of trade—again, pursuant to a robust understanding of “contradict.” That is because such evidence has no bearing on the *conceptual* question of contradiction or consistency. Instead, all that matters is whether the proposed interpretation or supplemental term is *logically* consistent with the standard meaning (or meanings) of the express terms. If the answer is “no,” then any related incorporation tools evidence is barred from further consideration in the case.

Critically, such a contradiction assessment is substantively indistinguishable from the ambiguity determination under textualism. The latter requires the judge to determine whether the language contained within the four corners of a written agreement is reasonably susceptible to the interpretations asserted by both parties. But that simply means that the judge must decide whether one of the parties is trying to contradict rather than construe the contractual language with its alleged understanding of the agreement. If the answer is “yes,” then the incompatible interpretation is rejected and any supporting extrinsic

395. For commentators adopting this view, see FARNSWORTH, *supra* note 366, § 7.13, at 474 (“In contrast to a plain meaning rule, under which evidence is not considered for the purpose of interpretation until there has been an evaluation of the clarity of the written contract, a test of consistency requires a consideration of the evidence of usage in order to determine whether it comports with the language of the written contract.”); 5 KNIFFIN, *supra* note 357, § 24.17, at 174 (“There is a distinction, however, between the prohibition of inconsistency and the plain meaning rule. Under both the UCC and the Restatement (Second) . . . a conflict with express language is identifiable only after the court has fully examined the proffered evidence of course of dealing or course of performance or trade usage. . . . Under the plain meaning rule, in contrast, a court would not examine the evidence of course of dealing, course of performance, or trade usage if the contract appeared unambiguous on its face.”). For cases adopting this view, see *Brooklyn Bagel Boys, Inc. v. Earthgrains Refrigerated Dough Prods., Inc.* 212 F.3d 373, 377-81 (7th Cir. 2000) (applying the four-corners rule, finding the contract to be unambiguous, and thus rejecting all extrinsic evidence, including evidence of course of performance, course of dealing, and usage of trade; then separately holding that the extrinsic evidence of the incorporation tools was inadmissible because the evidence was not reasonably consistent with the express terms, as required by § 2-202 and the precursor to § 1-303); *Bray Int’l, Inc. v. Computer Assocs. Int’l, Inc.*, Civil Action No. H-02-98, 2005 WL 6792280, at *8 (S.D. Tex. Sep. 30, 2005) (employing essentially the same analysis as *Brooklyn Bagel Boys* to reject course of performance evidence on both contradiction and ambiguity grounds).

evidence for that reading is barred from use. In sum, both versions of position three are fundamentally concerned with whether one party is offering an interpretation or supplemental term that cannot be logically reconciled with the express language of the parties' agreement. And thus, any differences between the two approaches are cosmetic rather than real, as recognized by at least two commentators.³⁹⁶

Each of the three positions regarding the relationship of express terms to course of performance, course of dealing, and usage of trade finds support in the language of the Code. But unlike the debate over partial and full contextualism discussed in the prior section,³⁹⁷ the statutory arguments at issue in this controversy have been exhaustively addressed by other scholars.³⁹⁸ Thus there is no reason to discuss them here.

The more important question for purposes of my empirical study is the status of the caselaw. To start with, it is not clear which position is the majority rule. Indeed, all three of the approaches have at least one champion in the secondary literature assessing the doctrine.³⁹⁹ That

396. See, e.g., Epstein et al., *supra* note 357, at 944 (explaining that when "extrinsic evidence cannot contradict express terms . . . that is the same result that would be reached by a court applying the common law."); Kirst, *supra* note 64, at 869 ("The courts construing subsection 1-205(5) [the precursor to 1-303(e)] as a false parol evidence rule continue to employ the plain meaning rule."). Some cases also implicitly reflect this understanding. See, e.g., *Golden Peanut Co. v. Hunt*, 416 S.E.2d 896, 898-99 (Ga. Ct. App. 1992) (analyzing whether proffered trade usage evidence improperly "contradicts" the express terms by focusing on whether the contract is ambiguous, and explaining that "[w]here the language of the contract is plain, unambiguous, and capable of only one reasonable interpretation, no other construction is permissible.").

Two qualifying points are in order. First, because judges are humans, those who actually review the incorporation tools evidence might be more likely to find that the asserted interpretation or supplemental term is consistent with the express language than judges who restrict their contradiction analysis to the four corners of the contract. If that is true, then the two versions of position three operate differently in practice than they should in theory.

Second, some scholars maintain that the UCC adopts an understanding of "contradiction" and "consistency" in §§ 1-303(e) and 2-202 that focuses on whether the firms in the relevant industry generally treat as incompatible the express language and the alleged meaning or supplemental term at issue. In other words, "contradiction" and "consistency" are to be understood in empirical terms rather than conceptual terms. See Kastely, *supra* note 363, at 807-10; Kirst, *supra* note 64, at 830-31. That is a plausible understanding of the Code. But it is not the reading used by courts who follow position three, as both of those authors also recognize.

397. See *supra* Part V.D.1.

398. See, e.g., Epstein et al., *supra* note 357; Kastely, *supra* note 363; Kirst, *supra* note 64.

399. For example, Professor Scott concluded that position one is the majority view. See Robert E. Scott, *The Case for Formalism in Relational Contract*, 94 NW. L. REV. 847, 872 (2000) (stating that courts "generally" resolve "interpretation questions by recourse to the contractual context."); *id.* at 866-71 (explaining the relevant statutory provisions and the interpreting caselaw). In her study of the UCC jurisprudence, Professor Bernstein found that position two is the leading approach. Bernstein, *supra* note 318, at 69-70, 82, 84-85. ("Under the relevant case law, however, courts are inclined to find usages to be consistent with even seemingly contradictory express terms, as long as the asserted usage does not 'totally negate' the express term."). And Professor Whitford concluded

would not pose a problem for my project if I could locate states with textualist common law that also consistently follow position one or even position two—both of which can fairly be labeled as contextualist—when applying the UCC. Unfortunately, significant authority endorsing (or at least appearing to endorse) position three exists in virtually every textualist jurisdiction I analyzed that otherwise was a potential candidate for Study Five. This includes the following territories: Alabama,⁴⁰⁰ Georgia,⁴⁰¹ Illinois,⁴⁰² Kansas,⁴⁰³ Minnesota,⁴⁰⁴ Missouri,⁴⁰⁵ New York,⁴⁰⁶ and Texas.⁴⁰⁷ While many of these states also contain decisions adopting positions one or two, none of them seemed sufficiently

that judges most often follow position three. Whitford, *supra* note 7, at 938 n.18 (“[M]ost courts find that if the written terms have a clear or plain meaning, summary judgement is appropriate, and jury consideration of the meaning of extrinsic evidence is not necessary. Once the terms contained in a writing are privileged, extrinsic evidence can be considered only if the writing is deemed ambiguous or incomplete . . .”).

400. See, e.g., *McLarty Constr. & Equip. Co. v. Mining, Ore & Equip. Co.*, 428 So. 2d 629, 633-34 (Ala. 1983); *Port City Constr. Co. v. Henderson*, 266 So. 2d 896, 899 (Ala. Civ. App. 1972).

401. See, e.g., *S. Concrete Servs., Inc. v. Mableton Contractors, Inc.*, 407 F. Supp. 581, 582-86 (N.D. Ga. 1975); *Golden Peanut Co. v. Bass*, 563 S.E.2d 116, 119 (Ga. 2002); *All Angels Constr. & Demolition, Inc. v. Metro. Atlanta Rapid Transit Auth.*, 539 S.E.2d 831, 834 (Ga. Ct. App. 2000); *Golden Peanut Co. v. Hunt*, 416 S.E.2d 896, 898-99 (Ga. Ct. App. 1992).

402. See, e.g., *Brooklyn Bagel Boys, Inc. v. Earthgrains Refrigerated Dough Prods, Inc.* 212 F.3d 373, 377-81 (7th Cir. 2000); *Advance Process Supply Co. v. Litton Indus. Credit Corp.*, 745 F.2d 1076, 1079-80 (7th Cir. 1984); *Midwest Generation, LLC v. Carbon Processing & Reclamation, LLC*, 445 F. Supp. 2d 928, 932-33 (N.D. Ill. 2006); *Midwest Builder Distrib., Inc. v. Lord & Essex, Inc.*, 891 N.E.2d 1, 19, 27-28 (Ill. App. Ct. 2007).

403. See, e.g., *Tri-State Commodities, Inc. v. GSO Am., Inc.*, 18 F. App'x 737, 742-43 (10th Cir. 2001); *Fisherman Surgical Instruments, LLC v. Tri-Anim Health Servs., Inc.*, 502 F. Supp. 2d 1170, 1179-80 (D. Kan. 2007); *Speth v. Whitham Farms Feedyard, L.P. (In re Sunbelt Grain WKS, LLC)*, 406 B.R. 918, 928-30 (Bankr. D. Kan. 2009); *Higginbotham Mgmt. Co. v. Cessna Aircraft Co.*, No. 106,345, 2012 WL 3135995, at *6-9 (Kan. Ct. App. July 27, 2012).

404. See, e.g., *Prakita Design & Projectos LTDA v. Marvin Lumber & Cedar Co.*, Civil No. 06-957 (JRT/RLE), 2006 WL 2788182, at *3-4 (D. Minn. Sep. 26, 2006); *Mies Equip., Inc. v. NCI Bldg. Sys., L.P.*, 167 F. Supp. 2d 1077, 1082-84 (D. Minn. 2001); *Bib Audio-Video Prods. v. Herold Mktg. Assocs.*, 517 N.W.2d 68, 72 (Minn. Ct. App. 1994).

405. See, e.g., *HHCS Pharmacy, Inc. v. Express Scripts, Inc.*, No. 4:16-CV-1169 RLW, 2017 WL 6493168, at *4-5 (E.D. Mo. Dec. 15, 2017); *J.R. Waymire Co. v. Antares Corp.*, 975 S.W.2d 243, 247 (Mo. Ct. App. 1998); *SAB Harmon Indus., Inc. v. All State Bldg. Sys., Inc.*, 733 S.W.2d 476, 486 (Mo. Ct. App. 1987).

406. See, e.g., *Summer Commc'ns, Inc. v. Three A's Holding, LLC*, No. 97-9095, 1999 WL 106216, at *1 (2d Cir. Feb. 26, 1999); *Kologel Co. v. Down in the Vill., Inc.*, 539 F. Supp. 727, 728-29 (S.D.N.Y. 1982); *Kolmar Ams., Inc. v. Bioversal Inc.*, 932 N.Y.S.2d 460, 461 (App. Div. 2011); *Korseska v. United Cargo Corp.* 258 N.Y.S.2d 432, 437 (App. Div. 1965).

407. See, e.g., *Global Octanes Tex., L.P. v. BP Exploration & Oil Co., Inc.*, 154 F.3d 518, 522 (5th Cir. 1998); *Bray Int'l, Inc. v. Computer Assocs. Int'l, Inc.*, Civil Action No. H-02-98, 2005 WL 6792280, at *8 (S.D. Tex. Sep. 30, 2005); *James L. Gang & Assocs., Inc. v. Abbott Labs., Inc.*, 198 S.W.3d 434, 437-38 (Tex. App. 2006); *Cook Composites, Inc. v. Westlake Styrene Corp.*, 15 S.W.3d 124, 131-33 (Tex. App. 2000); *Atl. Richfield Co. v. ANR Pipeline Co.*, 768 S.W.2d 777, 783-84 (Tex. App. 1989); *Liberty Enters., Inc. v. Moore Transp. Co.*, 679 S.W.2d 779, 784-85 (Tex. App. 1984).

contextualist in their approach to interpretation under the Code to warrant inclusion in my empirical study. Indeed, Virginia was the only state that met my study parameters and also appeared to contain no substantial authority endorsing position three. To be sure, my research was not exhaustive. A more comprehensive review might identify additional textualist states where positions one and two dominate the caselaw applying the UCC. But given the ubiquity of judicial opinions adopting a “no contradiction” approach to the relationship of express terms and the incorporation tools under the Code,⁴⁰⁸ I concluded that further research is not justified. This necessitated abandoning Study Five.

3. Partial Contextualism Under the Common Law

The last two subparts identified two aspects of the UCC caselaw that create critical problems for Study Five. First, liberal approaches to extrinsic evidence generally apply only to the incorporation tools.⁴⁰⁹ Second, many decisions use interpretative practices that are effectively or explicitly textualist.⁴¹⁰ This Subpart discusses a third and final problem: numerous cases in jurisdictions with generally textualist common law hold that some or all of the incorporation tools are exempt from the plain meaning rule. In other words, many *common law* decisions in these states embrace partial contextualism rather than a strict four-corners approach with respect to stage one of the interpretive process. This allows the judge to review course of performance, course of dealing, and/or usage of trade evidence without a prior finding that the contract is patently ambiguous and permits such evidence to alter the apparent plain meaning of an agreement.⁴¹¹ That is precisely what the

408. See 1 HAWKLAND & RUSCH, *supra* note 328, § 2-202:4, at 2-181 (“Many courts have interpreted the phrasing ‘explain or supplement’ [in § 2-202] to mean that the evidence cannot contradict the written terms, or in other words, if the usage of trade, course of dealing, or course of performance contradicts a written term, it should not be admitted into evidence.”); *id.* at 2-181 to 2-182 n.10 (collecting authorities); KNIFFIN, *supra* note 357, § 24.13, at 122 (“Cases abound in which trade usage has been held inadmissible because it ‘conflicts’ with express terms.”); *id.* § 24.16, at 155 n.342 (collecting cases stating that course of performance is subject to the four-corners rule and cases stating course of performance is an exception to the plain meaning rule).

409. See *supra* notes 364-65 and accompanying text.

410. See *supra* notes 391-408 and accompanying text.

411. Of the three incorporation tools, usage of trade has been discussed the most in the secondary literature. See, e.g., 12 LORD, *supra* note 43, § 34.5, at 45-50 (“[N]umerous cases have been decided in which words with a clear normal meaning were shown by usage to bear a meaning which was not suggested by the ordinary language used. . . . Therefore, evidence of usage may be admissible to give meaning to apparently unambiguous terms of a contract when other parol evidence would be inadmissible.”) (collecting authorities, including many from textualist jurisdictions); see also Robert A. Hillman, *Comment: More in Defense of U.C.C. Methodology*, 62 LA. L. REV. 1153, 1159 (2002) (“I would wager that a rigorous empirical survey of common law

Code permits according to the more liberal positions discussed in the prior subpart.⁴¹² Therefore, the application of partial contextualism to the incorporation tools under the common law in otherwise textualist states further breaks down the line between the Code and the common law on the subject of interpretation.

New York and Texas exemplify this final problem. Most decisions from state courts in the former jurisdiction hold that the incorporation tools are subject to the four-corners rules.⁴¹³ But there is an extensive line of federal authority applying New York law that permits the judge to consider course of performance or trade usage when deciding whether a contract is ambiguous.⁴¹⁴ In Texas, the caselaw is also deeply divided on whether the incorporation tools are exempt from the plain meaning rule. And the split is probably worse there than in New York because significant Texas state court authority exists on both sides of the issue.⁴¹⁵

cases would show that, on the whole, courts are quite receptive to evidence of custom and the parties' course of dealing.").

412. See *supra* notes 369-90 and accompanying text.

413. See, e.g., *OSFI Fund II, LLC v. Canadian Imperial Bank of Commerce*, 920 N.Y.S.2d 8, 9 (N.Y. App. Div. 2011); *Milonas v. Pub. Emp't Relations Bd.*, 648 N.Y.S.2d 779, 785 (N.Y. App. Div. 1996); *76 N. Assocs. v. Theil Mgmt. Corp.*, 518 N.Y.S.2d 174, 177 (N.Y. App. Div. 1987); *Salzman v. Bowyer Prods., Inc.*, 344 N.Y.S.2d 755, 756 (N.Y. App. Div. 1973).

414. The source of this line of authority appears to be *Eskimo Pie Corp. v. Whitelawn Dairies, Inc.*, 284 F. Supp. 987, 989-90, 995 (S.D.N.Y. 1968) (holding that evidence of "surrounding circumstances, common usage, and custom" as well as "subsequent conduct of the parties" could be submitted at a preliminary hearing to determine whether a patently unambiguous contract contained a latent ambiguity, but rejecting "evidence of the subjective understanding of the parties," including oral testimony regarding the preliminary negotiations and correspondences sent as part of such negotiations). Subsequent decisions in the line include the following: *World Trade Ctr. Props., L.L.C. v. Hartford Fire Ins. Co.*, 345 F.3d 154, 184 (2d Cir. 2003); *Seiden Assocs., Inc. v. ANC Holdings, Inc.*, 959 F.2d 425, 428-29 (2d Cir. 1992); *Deutsche Bank AG v. Ambac Credit Prods., LLC*, No. 04 Civ. 5594 (DLC), 2006 WL 1867497, at *13 (S.D.N.Y. July 6, 2006); *Random House, Inc. v. Rosetta Books LLC*, 150 F. Supp. 2d 613, 618, 620-22 (S.D.N.Y. 2001); *United Fire & Cas. Co. v. Arkwright Mut. Ins. Co.*, 53 F. Supp. 2d 632, 640-41 (S.D.N.Y. 1999); *Time Warner Cable v. City of New York*, 943 F. Supp. 1357, 1390 (S.D.N.Y. 1996). Apparently, older state court decisions from New York are also split on whether a patent ambiguity is required before the court may review trade usage evidence. See Joseph H. Levie, *The Interpretation of Contracts in New York Under the Uniform Commercial Code*, 10 N.Y.L.F. 350, 366-67 (1964).

415. Compare *Tex. Gas Expl. Corp. v. Broughton Offshore Ltd. II*, 790 S.W.2d 781, 785 (Tex. App. 1990) ("Custom and usage of trade are not relevant where the contract language is, like the language before this court, clear and unambiguous."), and *Corso v. Carr*, 634 S.W.2d 804, 808 (Tex. App. 1982) (adopting essentially the same understanding as the prior case), and *Commercial Union Ins. Co. v. Martinez*, 635 S.W.2d 611, 614 (Tex. App. 1982) (same), and *Hildreth v. Merle Norman Cosmetics, Inc.*, No. 08-02-00402-CV, 2004 WL 736991, at *4 (Tex. App. Apr. 6, 2004) (explaining that the conduct of the parties, which includes course of performance, is "immaterial" if the contract is unambiguous), with *XCO Prod. Co. v. Jamison*, 194 S.W.3d 622, 627 (Tex. App. 2006) (noting that trade usage should be considered in determining whether a contract is ambiguous); and *Zurich Am. Ins. Co. v. Hunt Petrol.*, 157 S.W.3d 462, 465 (Tex. App. 2004) (same); and *GTE Sw., Inc. v. Pub. Util. Comm'n*, 102 S.W.3d 282, 289 (Tex. App. 2003) (same).

This last problem is not as serious as the one discussed in the prior subpart—the problem of courts employing textualism to construe contracts governed by the UCC. That is because decisions applying partial contextualism to the incorporation tools under the common law in textualist states appear to be less pervasive than decisions in those same states that utilize textualism under the Code. As a result, there are some textualist jurisdictions with divided common law authority that clearly favors the position that the incorporation tools are subject to the four-corners rule.⁴¹⁶ And in other states, the decisional law overwhelmingly supports the conclusion that a judge may not consider course of performance, course of dealing, and usage of trade prior to a finding of patent ambiguity.⁴¹⁷ But the existence of so many opinions in textualist states permitting courts to review incorporation tools evidence when deciding whether a contract is ambiguous is still an important problem for any empirical study that seeks to compare the UCC to the common law.

* * *

Let me recap. The goal of Study Five was to assess interpretation litigation levels under the common law and the UCC in a set of textualist states. The critical assumption underlying such a study is that courts in these jurisdictions employ a reasonably pure form of textualism when interpreting contracts governed by the common law and a reasonably pure form of contextualism when interpreting contracts governed by the UCC. Unfortunately, this assumption is wrong.

416. Missouri fits into this category. See *Heiden v. Gen. Motors Corp.*, 567 S.W.2d 401, 404-05 (Mo. Ct. App. 1978) (“The statement that the admissibility of custom and usage is not limited to ambiguities also finds some support in a few older Missouri cases. . . . However, the majority as well as the more recent of the Missouri cases state a more narrow view and restrict application of custom and usage to only those contracts which are ambiguous.”); see also *Cordry v. Vanderbilt Mortg. & Fin., Inc.*, 370 F. Supp. 2d 923, 928 (W.D. Mo. 2005) (“As noted, however, the Court does not find the term ambiguous and thus does not need to examine the prior course of dealing.”); *J.S. DeWeese Co. v. Hughes-Treitler Mfg. Corp.*, 881 S.W.2d 638, 645 (Mo. Ct. App. 1994) (“Further, custom and usage may be used only to remove ambiguities, not to contradict the plain meaning of a written contract.”).

417. Oklahoma fits into this category. See, e.g., *Pitco Prod. Co. v. Chaparral Energy, Inc.*, 63 P.3d 541, 547 n.25 (Okla. 2003) (“A finding of ambiguity must be made before the court can look at the custom of the industry to determine the parties’ obligations.”); *Cook v. Okla. Bd. of Pub. Affairs*, 736 P.2d 140, 147 (Okla. 1987) (same); *Pub. Serv. Co. of Okla. v. Home Builders Assoc. of Realtors, Inc.*, 554 P.2d 1181, 1185 (Okla. 1976) (noting that “[i]f there is an ambiguity or uncertainty as to the meaning of the terms used in a written contract between the parties, usages and customs may be resorted to for the purpose of interpreting them and to fix and explain the meaning of the expressions and words of doubtful and various meaning.”).

Part V.D.1 established that decisions from textualist states applying the UCC generally exempt only course of performance, course of dealing, and usage of trade from the ambiguity requirement. That is because courts most often construe the Code as adopting partial contextualism rather than full contextualism. Part V.D.2 established that much of the UCC caselaw in these jurisdictions goes further: it subjects the incorporation tools to the same textualist-style principles that regulate other classes of extrinsic evidence. Finally, Part V.D.3 established that many decisions in textualist states employ a form of partial contextualism with respect to some or all of the incorporation tools when construing contracts governed by the common law.

In short, courts in textualist jurisdictions normally employ a combination of partial contextualism and textualism under both the Code and the common law. While the precise allocation of contextualist and textualist authorities may differ between the UCC and the common law in these states, the jurisprudence does not vary sufficiently to justify an empirical study comparing litigation levels under the two bodies of law.⁴¹⁸ Thus, I decided not to complete Study Five.

VI. STUDY FOUR: TEXTUALIST INTERPRETATION VERSUS CONTEXTUALIST INTERPRETATION IN STATES THAT SWITCHED FROM TEXTUALISM TO CONTEXTUALISM

A. Study Methodology and Results

Study Four has the same purpose and employs essentially the same research protocol as Study One. It is designed to address the textualist hypothesis that contextualism results in higher enforcement costs and the contextualist counter-hypothesis that textualism results in higher enforcement costs. For each hypothesis, the independent variable is the school of contract interpretation employed by the courts and the dependent variable is the level of enforcement costs. The null hypothesis is that there is no difference between textualism and contextualism in their impacts on litigation expenses.

There are two basic components to enforcement costs: (1) the number of lawsuits filed, and (2) how long those lawsuits last. As in Study One, these elements were measured here via three Westlaw

418. See also Hillman, *supra* note 411, at 1159 ("In general, my hunch is that the Code and the common law are not as distinct [regarding contract interpretation] as [Professor Robert] Scott believes."); Whitford, *supra* note 7, at 938 n.18 ("This account of the law suggests that application of the PER under the Code is not much different from the common law.").

searches for judicial opinions classified with key numbers that concern interpretation from the Contracts (95) and Evidence (157) topics.

There are only two differences between Studies One and Four. First, I made one minor adjustment to the three queries designed to retrieve interpretation cases. In particular, I added one key number that I mistakenly excluded from Study One.⁴¹⁹

Second, rather than running the searches in textualist states and contextualist states, I ran the searches in five contextualist states—Arizona, California, Colorado, New Jersey, and Washington—during two different time periods: a textualist period and a contextualist period. In Study One, I used the same ten-year block for both the textualist and contextualist groups: January 1, 2000, through December 31, 2009. All Westlaw searches included a date restriction limiting the dataset to cases decided during the first decade of this century.⁴²⁰ In the current project, I ran the searches in two distinct ten-year periods for each state. That is because the five territories adopted contextualism at five different points in time.

To control for the impact of other social and legal variations between the relevant eras that might confound the results, I ran a search in each state during the textualist and contextualist time periods for all cases tagged with any key number from the Contracts topic. As in Study One, the results of this search served as a proxy for the level of contract litigation.⁴²¹ If textualism and contextualism—in relation to each other—do not impact how many lawsuits are filed and the length of those proceedings, then one might reasonably expect the ratio of contract interpretation cases to general contract cases to be roughly the same in each state during the textualist and contextualist periods. In other words, if the ratio of cases returned by my three interpretation queries to the cases returned by the control query is constant for the textualist and contextualist eras in the five states, then the null hypothesis cannot be rejected. Alternatively, if the fraction of contract decisions that are interpretation decisions is higher during the contextualist periods by a statistically significant amount, this suggests that (i) parties file more interpretation lawsuits when contextualism is the law, (ii) interpretation lawsuits last longer under contextualism, or (iii) some combination of the two. And the reverse is true if the fraction is higher during textualist eras by a statistically significant level.

419. Details regarding how I created the search queries while conducting Study One are presented *supra* at notes 109-22 and accompanying text. And the precise searches I used in Study Four are set forth in the Appendix to this Article. See *infra* Appendix.

420. Silverstein, *supra* note 12, at 294.

421. *Id.*; see also *id.* at 289-91.

Several additional aspects of the time periods used in Study Four are worth noting. First, the textualist and contextualist periods for each of the five jurisdictions were determined via a detailed review of the local caselaw. I conducted this review with aid from my research assistants.⁴²²

Second, I set the textualist and contextualist time periods for each state close to the transition point in order to minimize the number of legal and social differences between the relevant eras beyond the shift in interpretation doctrine. For example, California adopted contextualism in 1968.⁴²³ I thus set the two time periods for that state at 1958 to 1967 (the textualism era) and 1970 to 1979 (the contextualism era). Those two decades are probably much more alike than, for example, 1950 to 1959 and 1980 to 1989. Keeping the textualist and contextualist periods in close temporal proximity thus reduces the impact of confounding variables.

Third, I used a slightly larger gap between the textualist and contextualist periods than appeared justified by the research to take into account operational aspects of American common law. For example, when the supreme court of a state adopts a new doctrine, it can take some time for the ruling to filter down to the lower state courts and into federal courts exercising diversity jurisdiction over disputes governed by local law.⁴²⁴ Likewise, state intermediate appellate and trial judges sometimes endorse new legal rules before their supreme court makes a change to the state's jurisprudence. I employed a small cushion around the transition point from textualism to contextualism to filter out the effects of these types of phenomena.

Fourth, the gap between the textualist and contextualist time periods varies for each of the five states. The California and Colorado gaps are only two years because both of those jurisdictions quickly shifted in their approach to contract interpretation. The Washington gap is nine years and the Arizona gap is eleven years. In each of those states, the caselaw was in flux for about a decade before the local courts fully embraced contextualism. Finally, the New Jersey gap is twenty-five years. The New Jersey Supreme Court adopted contextualist interpretation in 1953.⁴²⁵ But based on my analysis of the jurisprudence,

422. The research is on file with the author and most of it will not be detailed here.

423. See, e.g., *Pacific Gas & Elec. Co. v. G.W. Thomas Drayage & Rigging Co.*, 442 P.2d 641, 643-46 (Cal. 1968).

424. In my experience, local federal courts are often slower to cite state supreme court decisions constituting major breaks in precedent than lower state courts bound by the new ruling. Thus, the aspects of Study Four that are restricted to state courts might be more reliable than the aspects that focus on both state and federal cases.

425. *Atl. N. Airlines v. Schwimmer*, 96 A.2d 652, 656 (N.J. 1953).

the courts in that state did not begin to consistently use contextualism until 1978. From 1953 through 1977, the caselaw was divided between the two methods of interpretation.

The next two tables set forth the raw totals from Study Four. The first table contains the data that is exclusively from state courts. The second table contains the data from state and federal courts combined.

Table 1: State Court Cases Only

	Query 1	Query 2	Query 3	Control Search
	Group 1 95II(A) Selected ⁴²⁶	Group 1 95II(A) Selected + Group 2 157XI(D) All	Group 1 95II(A) Selected + Group 2 157XI(D) All + Group 3 157XI(A) All & 157XI(C) Selected	95 All
Textualist Periods				
Arizona (1973-1982)	59-36.4%	70-43.2%	86-53.1%	162
California (1958-1967)	198-29.7%	305-45.7%	368-55.2%	667
Colorado (1980-1989)	68-35.8%	83-43.0%	96-49.7%	193
New Jersey (1943-1952)	80-30.7%	91-34.9%	119-45.6%	261
Washington (1980-1989)	50-24.5%	70-34.3%	77-37.8%	204
<i>Total—Weighted*</i>	<i>456-30.7%</i>	<i>619-41.6%</i>	<i>746-50.2%</i>	<i>1487</i>
<i>Total—Unweighted**</i>	<i>31.4%</i>	<i>40.2%</i>	<i>48.3%</i>	
Contextualist Periods				
Arizona (1994-2003)	23-28.8%	26-32.5%	29-36.3%	80
California (1958-1967)	113-34.2%	148-44.8%	165-50.0%	330
Colorado (1992-2001)	99-48.5%	107-52.5%	117-57.4%	204
New Jersey (1978-1987)	31-27.0%	35-30.4%	38-33.0%	115
Washington (1999-2008)	93-40.4%	110-47.8%	112-48.7%	230
<i>Total—Weighted</i>	<i>359-37.4%</i>	<i>426-44.4%</i>	<i>461-48.1%</i>	<i>959</i>
<i>Total—Unweighted</i>	<i>35.8%</i>	<i>41.6%</i>	<i>45.1%</i>	
Contextualist minus Textualist				
<i>Weighted</i>	<i>6.7%</i>	<i>2.8%</i>	<i>-1.5%</i>	
<i>Unweighted</i>	<i>4.4%</i>	<i>1.4%</i>	<i>-3.2%</i>	

*“Weighted” means the sum of the interpretation *cases* from all five states divided by the sum of all contract *cases* from the same five states. Larger states have more impact under this measure.

***“Unweighted” means the sum of the *percentages* in each column divided by five. Each state has the same impact under this measure.

426. Included with each group is a brief description of the key numbers that constitute that group using terminology from West’s outline of the topic. Silverstein, *supra* note 12, at 295 n.482. The precise key numbers that constitute each group are identified in the Appendix. *Id.*

Table 2: State and Federal Court Cases

	Query 1	Query 2	Query 3	Control Search
	Group 1 95II(A) Selected	Group 1 95II(A) Selected + Group 2 157XI(D) All	Group 1 95II(A) Selected + Group 2 157XI(D) All + Group 3 157XI(A) All & 157XI(C) Selected	95 All
<u>Textualist Periods</u>				
Arizona (1973-1982)	64–36.4%	77–43.8%	93–52.8%	176
California (1958-1967)	220–30.4%	331–45.7%	396–54.7%	724
Colorado (1980-1989)	95–36.7%	109–42.2%	125–48.4%	258
New Jersey (1943-1952)	86–30.5%	99–35.1%	130–46.1%	282
Washington (1980-1989)	59–26.0%	81–35.7%	93–41.0%	227
<i>Total—Weighted</i>	<i>524–31.4%</i>	<i>697–41.8%</i>	<i>837–50.2%</i>	<i>1667</i>
<i>Total—Unweighted</i>	<i>32.0%</i>	<i>40.5%</i>	<i>48.6%</i>	
<u>Contextualist Periods</u>				
Arizona (1994-2003)	32–27.1%	39–33.1%	44–37.3%	118
California (1958-1967)	133–33.6%	173–43.7%	193–48.7%	396
Colorado (1992-2001)	139–44.6%	148–47.4%	161–51.6%	312
New Jersey (1978-1987)	49–28.5%	56–32.6%	61–35.5%	172
Washington (1999-2008)	113–39.5%	136–47.6%	139–48.6%	286
<i>Total—Weighted</i>	<i>466–36.3%</i>	<i>552–43.0%</i>	<i>598–46.6%</i>	<i>1284</i>
<i>Total—Unweighted</i>	<i>34.7%</i>	<i>40.9%</i>	<i>44.3%</i>	
<u>Contextualist minus Textualist</u>				
<i>Weighted</i>	<i>4.9%</i>	<i>1.2%</i>	<i>-2.0%</i>	
<i>Unweighted</i>	<i>2.7%</i>	<i>0.4%</i>	<i>-4.3%</i>	

Some additional explanation of the data is in order. First, the percentages listed in the tables for each state reflect the ratio of cases recovered by queries one, two, and three to the cases recovered by the control search. For example, in Table 1, query one returned fifty-nine decisions in Arizona during the textualist period (1973-1982). The control search for that jurisdiction and time period returned 162 opinions. Fifty-nine is 36.4% of 162. Second, I combined the numbers for the five textualist time periods and the five contextualist time periods in two ways—a weighted total and an unweighted total. To illustrate, in Table 1, the combined *weighted* total for the states during the textualist

periods and under query one is 30.7%. That figure was created by adding up all of the query one results for each state (456) and dividing that number by the sum of all the control search results for those states (1487). Using this measure, the states with more cases have greater impact on the ultimate percentage. By comparison, the combined *unweighted* total for the states during the textualist period under query one is 31.4%. That number was created by adding all of the query one percentages (36.4%, 29.7%, 35.8%, 30.7%, and 24.5%) and dividing by five. Using this measure, each state has equal impact on the ultimate percentage.

Turning to analysis of the data, and focusing first on the raw numbers, during the time periods in which states used a textualist approach, they had less interpretation litigation as a fraction of contract litigation than during the contextualist period under queries one and two, but had more under query three. Most relevant are the weighted and unweighted combined totals for each group of time periods. Consider, for example, the unweighted figures in Table 1. For the ten-year periods in which Arizona, California, Colorado, New Jersey, and Washington employed textualism, interpretation litigation constituted 31.4%, 40.2%, and 48.3% of total contract litigation, depending on the measure used for interpretation cases (queries one, two, and three). For the ten-year periods in which those five states used contextualism, the numbers are 35.8%, 41.6%, and 45.1%.

Table 3 lists all of the differences between the combined textualist-era percentages and the combined contextualist-era percentages.

Table 3: Differences Between Combined Totals from Tables 1 and 2

Table 1: State Court Cases Only			
	Query 1	Query 2	Query 3
<u>Contextualist minus Textualist</u>			
<i>Weighted</i>	6.7%	2.8%	-1.5%
<i>Unweighted</i>	4.4%	1.4%	-3.2%
Table 2: State and Federal Court Cases			
	Query 1	Query 2	Query 3
<u>Contextualist minus Textualist</u>			
<i>Weighted</i>	4.9%	1.2%	-2.0%
<i>Unweighted</i>	2.7%	0.4%	-4.3%

Applying a *t*-test methodology to each of the twelve measures, none of the differences are statistically significant at the .05 level. Therefore, the ultimate conclusion of this study is that the null hypothesis cannot be

rejected: The study cannot reject the hypothesis that there is no difference between textualism and contextualism in their impacts on the number of contract interpretation lawsuits filed and the length of those cases. In other words, the study finds no support for either the textualist hypothesis that contextualism has higher enforcement costs or the contextualist counter-hypothesis that textualism has higher enforcement costs.

B. Discussion

In Study One, there was no statistically significant difference between textualism and contextualism under thirteen of fourteen measures.⁴²⁷ Near the end of Article One, I offered several methodological and substantive explanations for these findings,⁴²⁸ which are summarized above.⁴²⁹ Because Study One and Study Four are nearly identical in structure and results,⁴³⁰ all of those explanations are applicable to Study Four as well. In this subpart, I review the most significant explanations and then discuss what those points suggest more generally about the Key Number System and contract interpretation.

The most straightforward explanation for my failure to find a statistically significant difference between textualism and contextualism in Studies One and Four is that enforcement costs are substantially the same under the two approaches. In Article One, I offered three reasons why this might be so.⁴³¹ Most crucially, I proposed that “the countless other factors that influence whether a lawsuit is filed and how long it lasts swamp any impact resulting from the interpretive approach in use by the courts.”⁴³² I have long been skeptical that there is a consequential variation between textualism and contextualism when it comes to litigation expenses. Indeed, that view was one of my principal motivations for beginning work on Article One and this Article. But while substantive explanations that take my study findings at face value are appealing to my theoretical commitments, the methodological limitations of my research protocol indicate that considerable caution is in order.

In Article One and in several sections above, I addressed numerous methodological problems inherent in (1) using the Key Number System

427. Silverstein, *supra* note 12, at 299-300.

428. *See id.* at 300-07.

429. *See supra* text accompanying notes 144-61.

430. *See supra* text accompanying notes 290-303.

431. Silverstein, *supra* note 12, at 305-07. I summarized that discussion in Part IV. *See supra* text accompanying notes 155-61.

432. Silverstein, *supra* note 12, at 307.

as a tool for empirical work, and (2) the precise research design I employed in Study One and Study Four.⁴³³ The most important limitations are as follows. First, Studies One and Four attempt to draw inferences about the population of all cases from a sample of reported decisions.⁴³⁴ But published opinions are likely not a representative subset of lawsuits generally.⁴³⁵ Second, over-coding, overbreadth, and foreign law might have corrupted my datasets.⁴³⁶ Third, under-coding could have biased my results because the interpretation and contract/control datasets in both studies excluded numerous published decisions involving those subjects.⁴³⁷ Fourth, there are many differences between the states in Study One and across time in Study Four that the control search for contract cases probably did not control for.⁴³⁸ And the search certainly could not account for geographic and temporal variations in general contract law.⁴³⁹ Fifth, sophisticated parties might be altering their contracting and litigation practices based on their perceptions about which interpretive approach is superior; such behavior could alter the level of interpretation litigation in textualist and/or contextualist states, critically undermining any attempt to measure the impacts of the two systems of contract construction.⁴⁴⁰ Sixth, the caselaw regarding contract interpretation is a labyrinth of complexity and inconsistency.⁴⁴¹ As a result, the jurisprudence in most states is a hybrid of textualism and contextualism rather than a pure version of either school.⁴⁴² It is thus possible that the textualist and contextualist territories and periods in my studies are too similar in their methods of contract construction for the differences that do exist to result in a measurable variation in enforcement costs.⁴⁴³ Given this list of methodological limitations, the findings of Studies One and Four are certainly open to dispute.

Some of the problems discussed in the prior paragraph actually do more than cast doubt on my study results. They also raise two broader issues: (1) whether the Key Number System is an appropriate tool for

433. See *supra* Parts III, IV, V.C.

434. See *supra* notes 109-28 and accompanying text (Study One); *supra* note 419 and accompanying text (Study Four).

435. See *supra* notes 93-94 and accompanying text.

436. See *supra* notes 96, 98, 136-39 and accompanying text.

437. See *supra* notes 97, 131-32, 181-90, 261-67 and accompanying text.

438. Silverstein, *supra* note 12, at 300.

439. See *supra* notes 149-51, 295-302 and accompanying text.

440. See *supra* notes 152-53 and accompanying text.

441. See *supra* notes 44, 147 and accompanying text.

442. See *supra* notes 45, 147 and accompanying text.

443. See *supra* note 148 and accompanying text.

conducting empirical research relating to contract interpretation; and (2) whether some of the hypothesized differences between textualism and contextualism are empirically measurable at all.

Starting with the first issue, recall the problem of overbreadth: Many Key Number System topics and subtopics are expansive in scope, encompassing what are normally considered distinct legal subjects. Recall also the problem of under-coding: There is significant overlap among numerous topics and subtopics; as a result, headnotes are often classified with only a subset of the relevant key numbers. These two limitations are particularly severe in the context of contract interpretation. A large number of topics and subtopics concern both interpretation and other fields of law, creating overbreadth issues.⁴⁴⁴ Under-coding is an even bigger difficulty. There are a myriad of topics and key numbers that address the construction of agreements.⁴⁴⁵ That makes under-coding ubiquitous in this area. In fact, a substantial majority of the interpretation opinions I reviewed while working on Article One and this Article suffer from under-coding.⁴⁴⁶ Given these points, I now believe that the Key Number System is not as useful for empirical research on contract interpretation as I previously thought.⁴⁴⁷

The challenges created by under-coding and overbreadth are best illustrated via a recap of Study Three. There is only one way to ensure that under-coding does not invalidate an empirical study conducted using the Key Number System when the study addresses a broad subject such as which approach to contract interpretation has higher enforcement costs: include all of the topics and subtopics that are pertinent to the research hypothesis in the Westlaw searches used to create the datasets.⁴⁴⁸ In other words, the project must have a structure approximating that of Study Three, where I planned to use all or virtually all of the interpretation and contracts key numbers in my Westlaw queries.⁴⁴⁹ Employing merely a subgroup of the relevant topics and subtopics creates a high likelihood of biased datasets.⁴⁵⁰

Unfortunately, Study Three suffers from insurmountable logistical and technical issues. To minimize the impact of overbreadth in that

444. Several examples from the Evidence topic (topic 157) are identified in the discussion of Study Three above. *See supra* notes 203-10 and accompanying text.

445. *See supra* notes 181-84, 218-25 and accompanying text.

446. *See also supra* notes 261-67 and accompanying text (discussing how West's classification practices result in under-coding).

447. I suspected this might be the case by the time I completed Article One. *See Silverstein, supra* note 12, at 293 n.476.

448. *See supra* note 192 and accompanying text.

449. *See supra* the text in the paragraph immediately following note 192.

450. *See supra* notes 278-82 and accompanying text.

project, I would need to review a representative sample of judicial decisions classified with key numbers that are candidates for inclusion in the Westlaw searches. But given the quantity of key numbers that relate to interpretation and contracts, such an audit would take far too long.⁴⁵¹ And even if I completed the review, I could not use all of the qualifying key numbers in the searches because of Westlaw's 600-character query limitation.⁴⁵²

In sum, the problems of under-coding and overbreadth, combined with the 600-character limit, create the following dilemma for any expansive study conducted via the Key Number System—whether the study addresses contract interpretation or a similarly broad subject: either complete the project despite potentially fatal under-coding that undermines the validity of the findings, or abandon the project on grounds of feasibility.

Note that the Key Number System remains a useful tool for studies that are narrower in scope. For example, one might measure how often a particular rule of construction is used by courts in textualist and contextualist jurisdictions. Designing a project like this to account for under-coding and feasibility concerns will usually be rather easy. The same is true for studies addressing any of the countless legal subjects that are not nearly as broad as contract interpretation writ large.⁴⁵³ But for projects like mine, which attempt to comprehensively assess one or more of the general impacts of textualism and contextualism, the Key Number System is not as useful as I had hoped.

Turning to the second issue, the complexity and confusion in the contract interpretation jurisprudence engender doubt about the value of expansive empirical studies comparing textualism to contextualism. The fundamental problem is this: In most states, the caselaw appears to be a hybrid of the two schools of thought. As a result, an empirical study comparing a significant number of “textualist” and “contextualist”

451. See *supra* Part V.B.1. Note that if I used an alternative method to control for differences across state lines—a method that does not involve key number searches—this would limit the scope of the review to cases tagged with the candidate *interpretation* key numbers. There would be no need to analyze cases marked with the *contracts* key numbers. (For some discussion of potential alternative controls, see Silverstein, *supra* note 12, at 290 & nn.464-65.) However, even this more circumscribed review would require far too much effort.

452. See *supra* Part V.B.2. Study Three also suffered from critical methodological problems. See *supra* Part V.B.3. For example, using all of the interpretation key numbers raises the danger of an alternative type of bias in the dataset potentially as problematic as that created by under-coding. See *supra* notes 269-76 and accompanying text.

453. See, e.g., Nicholas L. Georgakopoulos, *Contract-Centered Veil Piercing*, 13 STAN. J.L. BUS. & FIN. 121, 123-30 (2007) (empirical study of piercing the corporate veil using the Key Number System). For my summary of this article and a related piece by Professor Georgakopoulos, see Silverstein, *supra* note 12, at 224-26.

jurisdictions is not actually a comparison of pristine versions of textualism and contextualism. Instead, it is a comparison of two mixed approaches to the construction of agreements. Such research might have real scholarly value, as I believe is true for Studies One and Four. But given the state of the caselaw, it is hard to see how the results of projects like mine, whether completed via the Key Number System or using some other technique, could come close to definitively answering questions such as which approach to contract interpretation best minimizes enforcement costs, transactions costs, or error costs.⁴⁵⁴ The law in most territories is simply too impure to allow for a genuinely reliable assessment of whether textualism or contextualism is superior across these and various other dimensions.⁴⁵⁵

Perhaps more American states follow an unadulterated approach to interpretation than I realize. A comprehensive review of the caselaw might uncover a greater number of such jurisdictions than I found during my work on Article One and this Article. But the consensus among scholars and judges is that the law governing the construction of agreements is deeply confused in most states. If that consensus is correct, then it will be exceedingly difficult to design empirical studies that effectively address the issues at the center of the debate over contract interpretation.

VII. CONCLUSION

I had two general purposes in writing this Article. The first was to contribute further to the academic debate regarding the optimal method of contract interpretation by executing new empirical studies analyzing the relationship of interpretive approach and enforcement costs. The second was to provide additional insights regarding how to use the West Key Number System as a data collection and coding device. While I believe the piece accomplished both purposes, I had considerably less success with the first.

454. The debate over which method of construing agreements leads to more accurate interpretations is often conceptualized in terms of which school best reduces “error costs.” See, e.g., George M. Cohen, *Interpretation and Implied Terms in Contract Law*, in 6 *ENCYCLOPEDIA OF LAW AND ECONOMICS* 125, 147 (Gerrit De Geest ed., 2011).

455. Indeed, sometimes “textualist” and “contextualist” doctrine is so similar in content that a proposed study is clearly not worth completing at all. Study Five is illustrative. For that project, I planned to compare textualist common law interpretation with contextualist UCC interpretation in a set of textualist states. But I terminated my work on this study because in jurisdictions that subscribe to textualism, common-law and UCC interpretation overlap too much to make a comparison fruitful. See *supra* Part V.D.

As with Study One, the results of Study Four conflict with what is perhaps the signature claim advanced by textualist courts and commentators in defense of their position: that contextualism increases the level of interpretation litigation from the textualist baseline. But Studies One and Four together are only weak evidence against textualism because of the methodological limitations inherent in my research protocol. As a result, we remain a long way from answering whether one of the approaches to contract interpretation better reduces enforcement costs.

APPENDIX: WESTLAW SEARCHES USED IN THE STUDY

This Appendix sets forth the searches I ran on Westlaw to collect the data for Study Four. Recall that I organized the key numbers chosen for the study into three groups: (1) contract interpretation key numbers from the Contracts topic (topic 95), (2) contract interpretation key numbers from the Evidence topic (topic 157), and (3) parol evidence rule key numbers from the Evidence topic. The search terms for each group are listed below.

Next, I constructed three search queries for each state. The first query contained only the key numbers in group (1). The second contained the key numbers in groups (1) and (2). And the third contained the key numbers in all three groups—(1), (2), and (3). The three queries were run in (a) the relevant state database, and (b) the relevant state and federal databases together. Thus, there were six searches in total for each jurisdiction during both the textualist time period and the contextualist time period. The results of these searches served as proxies for the level of contract *interpretation* litigation.

The three queries were run in exactly the same form in every state database and each of the three is presented below. Running the queries in the state and federal databases together required additional search language to limit the cases retrieved to the appropriate jurisdiction. Accordingly, I have set forth the three queries as run in the Arizona state and federal databases to highlight the limiting language that was necessary.

I also ran a control search for all cases classified with a contracts key number. This search served as a proxy for the total level of *contract* litigation in each state during the time periods of the study. Like the three interpretation queries, the control required additional restrictive language when it was run in both the state and federal databases. I thus have set forth both versions of the control search—state *and* state/federal—again using Arizona as an example of the latter.

Finally, all queries were run with a ten-year date restriction that limited the dataset to cases decided during the designated textualist and contextualist periods for each state. The search language restricting the results to the appropriate time periods is not contained in the queries

below because it varies for each jurisdiction. Instead, I have included the letter x where the numbers setting out the dates would otherwise be.

Group 1: Topic 95 (Contracts), Section II, Subsection (A)—Selected Key Numbers.

95k143 95k143.5 95k147 95k148 95k149 95k150 95k151 95k160
95k161 95k162 95k163 95k164 95k165 95k166 95k167 95k169 95k170
95k171 95k172 95k173 95k174 95k175 95k176 95k190

Group 2: Topic 157 (Evidence), Section XI, Subsection (D)—All Key Numbers.

157XI(D)⁴⁵⁶

Group 3: Topic 157 (Evidence), Section XI, Subsection (A)—All Key Numbers *and* Subsection (C)—Selected Key Numbers.

157XI(A)

157k439 157k440 157k441 157k442 157k443 157k444⁴⁵⁷

Query 1—State (Group 1).

(95k143 95k143.5 95k147 95k148 95k149 95k150 95k151 95k160
95k161 95k162 95k163 95k164 95k165 95k166 95k167 95k169 95k170
95k171 95k172 95k173 95k174 95k175 95k176 95k190) & da(aft
xx/xx/xxxx) & da(bef xx/xx/xxxx)

Query 2—State (Groups 1 & 2).

(157XI(D) (95k143 95k143.5 95k147 95k148 95k149 95k150
95k151 95k160 95k161 95k162 95k163 95k164 95k165 95k166 95k167
95k169 95k170 95k171 95k172 95k173 95k174 95k175 95k176
95k190)) & da(aft xx/xx/xxxx) & da(bef xx/xx/xxxx)

Query 3—State (Groups 1, 2, & 3).

(157XI(D) (95k143 95k143.5 95k147 95k148 95k149 95k150
95k151 95k160 95k161 95k162 95k163 95k164 95k165 95k166 95k167
95k169 95k170 95k171 95k172 95k173 95k174 95k175 95k176
95k190) (157XI(A) 157k439 157k440 157k441 157k442 157k443
157k444)) & da(aft xx/xx/xxxx) & da(bef xx/xx/xxxx)⁴⁵⁸

456. Using this term in a search will retrieve all cases with any key number contained in this section of the Evidence topic outline.

457. These are the selected key numbers from topic 157, section XI, subsection (C).

458. Note that some of the parentheses in these searches are superfluous. I included them when I ran the searches because they make it easier to see precisely what I was searching for without altering the results retrieved.

Query 1—State & Federal (Group 1).

Here is the search I ran for Arizona state and federal cases:

co(az) & (95k143 95k143.5 95k147 95k148 95k149 95k150 95k151 95k160 95k161 95k162 95k163 95k164 95k165 95k166 95k167 95k169 95k170 95k171 95k172 95k173 95k174 95k175 95k176 95k190) & da(aft xx/xx/xxxx) & da(bef xx/xx/xxxx)

Notice the italicized language at the start of the search, which was not included in query 1 when I searched only for state cases. A search using query 1 without the italicized language would have retrieved numerous cases that did not originate in Arizona, such as Ninth Circuit cases that were initially filed in California or another state within that circuit. The italicized language (substantially) restricted the search to cases arising in Arizona.

Comparable language was used in all state/federal searches. For example, I included “co(co)” for the Colorado queries and “co(#ca)” for the California queries.⁴⁵⁹

Query 2—State & Federal (Group 1 & 2).

co(az) & (157XI(D) (95k143 95k143.5 95k147 95k148 95k149 95k150 95k151 95k160 95k161 95k162 95k163 95k164 95k165 95k166 95k167 95k169 95k170 95k171 95k172 95k173 95k174 95k175 95k176 95k190)) & da(aft xx/xx/xxxx) & da(bef xx/xx/xxxx)

Query 3—State & Federal (Group 1, 2, & 3).

co(az) & (157XI(D) (95k143 95k143.5 95k147 95k148 95k149 95k150 95k151 95k160 95k161 95k162 95k163 95k164 95k165 95k166 95k167 95k169 95k170 95k171 95k172 95k173 95k174 95k175 95k176 95k190) (157XI(A) 157k439 157k440 157k441 157k442 157k443 157k444)) & da(aft xx/xx/xxxx) & da(bef xx/xx/xxxx)

Control Search—State.

to(95) & da(aft xx/xx/xxxx) & da(bef xx/xx/xxxx)⁴⁶⁰

Control Search—State & Federal.

co(az) & to(95) & da(aft xx/xx/xxxx) & da(bef xx/xx/xxxx)

459. Note that Westlaw uses the letters “ca” to refer to California *and* to courts of appeal. Thus, to restrict a search to federal cases arising in California, the appropriate court restrictor is co(#ca). The pound sign insures that Westlaw reads “ca” as referring to a state rather than a type of court.

460. This search retrieves all cases tagged with any topic 95 (Contracts) key number in the relevant database.
