

Tracking Inconsistent Judicial Behavior

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Abstract

This paper explores the phenomenon of inconsistent judicial decisions. We track inconsistency in the decisions of judges to hold arbitration provisions unconscionable. We analyze 174 legal decisions from the California Court of Appeal and present a methodology for mapping the facts of these cases.

Our results indicate that cases conflict with about one quarter of relevant precedents. Our analysis shows that where the facts suggest a case is “easy”, the case is decided consistently with precedent. Inconsistency arises with “hard” cases where the facts suggest the case is near the boundary of liability. Conflicting political ideology of judges in these cases is shown to be the major source of this inconsistency.

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The field of law and economics has primarily sought to evaluate the impact and efficiency of legal rules. Less time and effort has been devoted to evaluating the efficiency of the court system. Indeed, much of the law and economics literature assumes that the court system operates perfectly. This assumption relegates judges, the central decision-making agent in the common law system, to that of an automaton. However, even when the rules or standards are moderately precise, judges—particularly at the appellate level—are afforded a degree of discretion. In such an environment, inconsistent decisions from the same jurisdiction may result.

Inconsistent and unpredictable legal decisions impose costs upon society. These costs are especially salient in commercial fields of law where judges are “significant economic policymakers” (Stephenson 2009, at 191). We offer three examples of these social costs. First, if judges are simply randomizing there will be significant portion of “inefficient” decisions.¹ For example, if judges strike down efficient contracts in fifty per cent of cases, efficient trades will be discouraged. Second, inconsistency in the law makes it difficult for economic agents to plan their activities with certainty. If parties are risk averse, unpredictability in the law generates uncertainty which parties seek to avoid by engaging in additional contracting costs. Third, if laws were certain and parties could easily predict the outcome of litigation, the likelihood of the parties settling the dispute is greatly increased. Uncertain legal outcomes may encourage litigation activity and increase administrative costs. To avoid these costs of inconsistency, the common law seeks to adhere to the doctrine of precedent: like cases should be decided the same way. However, the extent to which precedent *actually* constrains judges has long been a source of debate among legal scholars.²

This paper empirically measures the extent to which legal decisions are inconsistent. Specifically, we analyze the inconsistent enforcement of contracts. Some contractual provisions are struck down by courts as being unfair. While in other cases in the same jurisdiction, contractual provisions which appear to be more egregious and concerning are enforced. We empirically analyze inconsistency by examining 174 cases from the California Court of Appeal that focus on a very narrow issue: the unconscionability of arbitration provisions in standard-form contracts. The law of unconscionability is notoriously difficult to define and judges have struggled to define the

¹ Such a finding would cast a shadow of doubt upon Posner’s ([1973] 2007) hypothesis that the common law promotes efficient rules.

² Legal realists and critical legal scholars contend that the law is characterized by indeterminacy that emanates from conflicting sources of law. Judges have leeway to legitimately decide either way in a dispute and decisions reflect the different policy values of judges (see e.g., Holmes (1897), Hutcheson (1929), Frank (1930), Llewellyn (1951), Kennedy (1986), Gennaioli and Shleifer (2007)). Frank (1931) and Cardozo (1921) suggest that a judicial decision makes law that is applicable only to the case at hand and does not legislate over future conduct. On the other hand, Schauer (1987) argues that past decisions constrain judges in future cases.

boundary of liability of this standard. Such standards are more difficult for judges to determine than simple rules and allow the court a large degree of discretion in deciding cases.³ The vast caseload in California on this narrow issue provides a suitable universe for analyzing inconsistency.

In order to make claims of “inconsistency” we need a measure of the fact-pattern in each particular case. We cannot say that cases are inconsistent simply because one case favors the plaintiff, while a later case favors the defendant. It could simply be that the defendant’s behavior in the latter case was more egregious than in the former case. In order to get a measure of the facts in each case in our dataset, we use text parsing software and to analyze what factors the judge is focusing on in the written judicial opinions.

We recognize that our empirical methodology using the words of the written judgments cannot perfectly capture the objective facts of the case. Using the written opinions to measure the facts is analogous to trying to determine the objective quality of a student’s paper from the grade the paper receives and the teacher’s comments, but not from the actual paper. This is clearly not perfect. Judges may manipulate the facts of the case at hand such that it does not appear to fall within the determined areas.⁴ However, this fact discretion will bias *against* a finding of inconsistency.⁵ Since judges may pick and choose the facts to discuss in the opinion to best support their finding, the perceived inconsistency between cases will be reduced. Endogenous loquacity and use of judicial rhetoric may obscure our ability to objectively map facts; however, we furnish our statistics with examples to illustrate that, in spite of such noise, we are capturing the essence of the facts of each case *and* the essence of inconsistency.

We create two numerical scores that seek to measure the two key dimensions of the unconscionability doctrine in California. The first score presents a measure of the procedural unconscionability. That is, how was the contract formed or was there an imbalance in the bargaining? The second score presents a measure of the substantive unconscionability. That is, is the actual provision in question so unfair that it shocks the conscience? These two dimensions are mentioned in *every* case. Our model relies on the existence of “material” dimensions that are aggregations of *related* factors. Legal scholars

³ See Kaplow (1992) on the costs of adjudicators applying a standard to past conduct. On judicial discretion, beyond the literature cited below on other empirical measures of inconsistency, see Shavell (2007) and references cited within on the optimal level of discretion that should be afforded to decision makers, such as courts.

⁴ This phenomenon of fact discretion is discussed in greater detail in Frank (1930) and Gennaioli and Shleifer (2008).

⁵ In our model, judicial fact discretion aids the appearance of convergence of law. We abstract away from the problems that judges in subsequent cases have in evaluating the quality and integrity of information contained in previous judgments and the redundancy of certain facts. See Shapiro (1972) for more on the quality of judgments.

may contend that our framework does not reflect legal inconsistency, since judges could easily distinguish between different factors within procedural unconscionability or within substantive unconscionability. However, such distinctions could be illusory. From a social science perspective, we are interested in *real* distinctions.⁶ The appropriate aggregation of factors into material dimensions is, no doubt, subjective. Previous theoretical models of common law evolution with discrete material dimensions also implicitly aggregate related factors; however, the problems are more pressing when attempting to fit empirical data to the model as we do in this paper. In spite of this simplification, our methodology captures two important statistics that measure how concerned the authoring judge found the fact pattern. These two statistics alone correctly predict the outcome in over 75% of our cases.

Once we have a measure of the facts, we turn to the task of identifying inconsistency. We create a pairwise dataset that compares each case with every precedent that had been heard at the time of each case.⁷ There are two scenarios where cases and precedents may be held to be inconsistent. Cases and precedents are inconsistent if: (1) a case holds that a contract should be enforced when a precedent held that a less concerning contract should not be enforced; or (2) a case holds that contract should not be enforced even though a precedent held that a more concerning contract should be enforced.

Our results can be briefly summarized. We find evidence of inconsistency in our sample. Where cases fall within the ambit of precedent, the outcomes of the case and precedent are inconsistent in about 23% of case-precedent pairs. Our findings empirically support the hypothesis proffered by Kornhauser (1989) and Posner (2008) that neither extreme formalism nor extreme skepticism adequately describe judicial behavior.

We take our analysis a step further, identifying *sources* of unpredictability in the law. What is different about cases that are decided inconsistently with precedent to those that are decided consistently? “Easy” cases—those cases where the facts appear clearly unconscionable or clearly not unconscionable—are usually decided as one would predict. These “hard” cases—at the boundary of liability—are where inconsistency arises. Once we control for how “hard” a case is, the primary source of this inconsistency is the political ideology of each of the benches hearing cases. A conservative bench deciding a case is more likely to conflict with precedents set down by a liberal bench, and *vice versa*. This adds empirical insight into the classic debate

⁶ On this point see Fernandez and Ponzetto (2008).

⁷ We use the term “precedent” in this paper to refer to all “alike” cases decided prior to the case at hand. What constitutes “alike” is a difficult question (see Schauer (1987) and Kornhauser (1989)). We note that our empirical analysis uses a very narrow sphere of law that renders our sample smaller than it could possibly be if we had adopted a broader definition of “alike”.

between H.L.A. Hart and Ronald Dworkin on whether judges do in fact exercise discretion in “hard” cases.⁸ Our findings suggest that judges turn to their political preferences for guidance when the cases are hard. Our data further suggest the publication status of the precedent may also be a source of conflict; however, this result is less robust.

These findings—that inconsistency arises with “hard” cases and can be partially explained by judicial ideology—are not particularly surprising. This seems to confirm that our methodology does a good job of tracking the facts and exposing inconsistency. Nonetheless, throughout the paper we take additional steps to determine how much of this inconsistency is potentially being driven by “noise” in our data. While measurement error would certainly inflate our measure of inconsistency, conflicting political ideology remains a source of inconsistency under these robustness checks.

The framework in this paper captures the phenomenon of inconsistency with greater precision than previous related empirical literature. Niblett, Posner, and Shleifer (2009) analyzes the evolution of a common law rule over a period of 35 years and show that *different jurisdictions* employ exceptions to the rule inconsistently. In about 12% of cases, state appellate courts employ exceptions that the vast majority of other states reject. Although in practice this 12% number is difficult to compare the 23% inconsistency found in the current paper, we take this as being suggestive evidence that the levels of inconsistency are greater when adjudicating a standard (such as unconscionability) compared to adjudicating a rule (such as the economic loss rule).

Most of the empirical work analyzing facts and outcomes of cases has emerged from political science. These analyses often use *logit* or *probit* models to regress the outcome of cases on a variety of inputs describing the facts of these cases and then “back out” a predicted legal rule.⁹ Cases deemed “inconsistent” with the rule are those that are incorrectly predicted. When cases are completely consistent but the rule is complex,¹⁰ simple regressions of the content of legal rules cannot accurately capture the rule, which overstates “inconsistency”.¹¹ Further, very few of these studies take

⁸ See e.g., Hart (1961) and Dworkin (1977).

⁹ See e.g., Kort (1957), Segal (1984), George and Epstein (1992), Kritzer and Richards (2003), and Segal and Spaeth (2002).

¹⁰ For example, where there is more than one material dimension and the threshold rule is not a simple linear relationship, the non-linear rule cannot be accurately measured by simple regressions.

¹¹ The fact-pattern literature has been the subject of criticism for overstating the power of results (see e.g., Edwards (1998)) and for inadequately connecting the empirical analysis to theoretical underpinnings of judicial law-making. Cameron and Kornhauser (2005), for example, show that the regression techniques used in the fact-pattern analysis literature misrepresent

advantage of the sequential nature of legal decisions to explore how law evolves over time.¹² The extent of inconsistency in a sphere of law depends on the order that cases arise as well as the facts of cases. Our framework exploits the sequential and incremental nature of decisions to capture this evolution better than the previous literature does.

In the next section, we outline the law under examination and summarize our data. Section III describes our methodology for mapping the facts of cases and provides illustrative examples. Section IV describes our empirical framework. We illustrate how our dataset of pair-wise case comparisons is created and outline the extent of inconsistency in the law. We further examine the degree of influence that precedents have over subsequent decisions. Section V investigates the sources of inconsistency. A final section concludes.

II. Data: Enforcing Arbitration Clauses

A. Unconscionable arbitration clauses

We examine inconsistency in the enforcement of arbitration clauses found in standard-form contracts in California. Specifically, we focus on the unconscionability doctrine. Unconscionability is a judicially-created doctrine that is notoriously difficult to define.¹³ Crudely put, the doctrine stipulates that contracts will not be enforced if they are manifestly unfair to one party.

Standard-form contracts sometimes fall afoul of the unconscionability doctrine. Since they are rarely read and are presented on a take-it-or-leave-it basis that precludes negotiation, some legal scholars have argued—and courts have held—that this contracting environment may allow the drafting party to insert unfair provisions into the contract.¹⁴ Such contracts are however

partitioned case spaces where the actual rule is nonlinear. Kastellac (2007) illustrates how classification trees can better capture the structure of such rules.

¹² Wahlbeck (1997, 1998) and Kastellac (2007) are noted exceptions. Wahlbeck (1997) and Kastellac (2007) both use the search and seizure cases from Segal (1984) to analyze changes in the law over time.

¹³ E.g., the Uniform Commercial Code does not offer a definition of unconscionability, and an appeals court in New York noted: “deciding the issue [of unconscionability] is substantially easier than explaining it.” *Jones v. Star Credit Corp.*, 298 N.Y.S. 2d 264, 266 (1969).

¹⁴ Examples of scholarly literature in this vein include Kessler (1943) and Rakoff (1983) who contend that courts should not enforce “contracts of adhesion” that allow the drafting party to include unfair terms in the contract that remain hidden from the weaker, non-drafting party. Some economic assessments of standard-form contracts do not share these concerns (see e.g., Eisenberg (1982), Bebchuk and Posner (2006), and Baird (2006)), while others claim that legal intervention into such contracts has little effect on contracting behavior (Katz (1990)).

ubiquitous in today's market economy. Boilerplate contracts are commonly found in employment and consumer agreements.¹⁵

We examine only appeals cases. This means that we focus on a small, and potentially atypical, subset of disputes.¹⁶ Disputes that make it to the appellate level are more likely to be contentious and likely to be on the boundary of liability. Examining this subset may lead readers to believe our sample is subject to selection bias. However, we restrict our analysis to standard-form contracts. This enables us to reduce, but obviously not eliminate, problems of selection bias and endogeneity. The disputes have a similar background. That is, the same potentially unconscionable contract has been used in a number of other agreements with other non-drafting parties.

Arbitration clauses are commonly found in standard-form contracts in consumer and employment contracts.¹⁷ These clauses stipulate that any dispute under the contract will not be heard by a court of law, but rather taken to arbitration. While arbitration has a variety of benefits over judicial dispute resolution,¹⁸ employees and consumers rarely read standard-form contracts and therefore may not know that they have waived their right to a jury trial or class action. Further, avenues for appeal following arbitration are often limited; and the costs of arbitration may be unfairly split under the contract and prohibitive to some plaintiffs. Opportunistic employers and sellers may write arbitration clauses that abolish the other side's right to have her dispute heard.

B. Material dimensions of unconscionability: procedural and substantive concerns

Courts will not enforce arbitration clauses that are unconscionable. We divide concerns over the defendant's behavior into two material

¹⁵ Slawson (1971, p.529) contended that "99% of contracts are standard-form contracts" and Ben Shahr (2007, p.ix) notes that boilerplate "is more prevalent than ever in commercial trade and in electronic commerce".

¹⁶ Priest and Klein (1984), and related subsequent literature, have shown that appeals cases do not necessarily provide an unbiased sample of the entire distribution of disputes.

¹⁷ Few empirical examinations of clauses in standard-form contracts exist (although see Johnson (2006), and Woodward (2006)). Marotta-Wurgler (2006) notes that arbitration clauses are less likely to be found in software End-User License Agreements than other types of dispute resolution provisions such as choice of law and choice of forum provisions. Arbitration clauses are also commonly found in collective bargaining agreements, securities brokerage contracts, and contracts between insurance companies. However, we do not see the issue of unconscionability arise in these contracts in our sample of cases.}

¹⁸ E.g., arbitration is often less costly and much faster than judicial dispute resolution; the details of the resolution are not disclosed; and arbitrators with expertise can be appointed in highly-technical disputes that judges may not fully understand.

dimensions: procedural concerns and substantive concerns. Even though no standardized test or criteria exist for determining whether a contractual provision is unconscionable, California judges accept that unconscionability has “both a procedural and a substantive element, both of which must be present to render a contract unenforceable”.¹⁹ The two elements need not be in equal measure. Under the “sliding scale” approach to unconscionability, the more substantively unconscionable the contract term in question, the less evidence of procedural unconscionability is required, and *vice versa*. If we were to focus on just one element (i.e., “concerns” generally), we would not be able to capture this sliding scale approach in our data.

The **procedural dimension** relates to the fairness of the bargaining process. There are no specified criteria that courts use when examining procedural unconscionability. It may be evidenced by a number of different factors; none of which are necessary or sufficient. If a clause is hidden in a contract or the language employed is not easily comprehensible then the costs of reading and understanding the contract rise; while a short, concise, and clearly-written contract may not *per se* attract too much concern on procedural grounds. The complexity of the contract becomes a factor of greater importance if the plaintiff is perceived to be weaker. Judges will be increasingly concerned with a contract if the non-drafting party is not educated, does not understand English, or is ill, old, or mentally infirm.²⁰ A sophisticated plaintiff with experience in business mitigates procedural concerns. However, even sophisticated consumers and employees may be coerced into signing without being given adequate time to read and understand the terms of the contract or the drafting party may misrepresent the true nature of the terms in the contract. If the non-drafting party has “no real choice” but to sign,²¹ this will also be indicative of procedural concerns.

The **substantive dimension** relates to the fairness of the actual provision in question. Contract terms that are so one-sided such that they “shock the conscience,”²² or are harsh or oppressive will be deemed substantively unconscionable. Clauses may be substantively unconscionable for different reasons.²³ Courts look to whether the arbitration provision

¹⁹ Bolter v. Superior Court, 87 Cal. App. 4th 900, 906 (2001).

²⁰ Clark (1987) and Cartwright (1991) examine a number of vitiating factors that render contracts procedurally unconscionable.

²¹ See Fried (1981) at 104.

²² Rochin v. California, 342 U.S. 165 (1952).

²³ For example, the price in the contract may be excessive (*see e.g.*, Toker v. Westerman, 113 N.J. Super. 452 (1970) where the price of a freezer in the contract was 150% more than the fair market price); the contract may include illegal disclaimers of liability (*see e.g.*, Broadley v. Mashpee Neck Marina, Inc., 471 F.3d 272 (1st Cir., 2006) where the disclaimer was deemed to be too broad in the claims that it covered); or the contract could include a change of forum provision that stipulates the hearing will be on the other side of the country (*see e.g.*, Nagrampa

unduly favors the drafting party. If the clause stipulates that the arbitrator of the dispute be an employee of the drafting company, if there are prohibitions on consolidated suits, or if the contract stipulates that the costs of arbitration are to be borne by the non-drafting party, then the clause may be deemed to unfairly favor the drafting party. An arbitration provision may be lacking in mutuality if the provision applies only to the non-drafting party.

Ceteris paribus, a marginal increase in either dimension increases the costliness to society if the contract is enforced. Marginal increases in procedural concerns increase the costs to the non-drafting plaintiff of reading the contract and learning the terms. If these transaction costs are prohibitively high then contracts formed in such an environment are a barrier to efficient trade. The substantive fairness of the provision affects the division of surplus. Marginal increases in substantive unfairness reduce surplus that the non-drafting plaintiff receives and may leave the plaintiff with negative surplus. The size of the surplus may be further reduced if the drafting party is able to insert inefficient clauses without the other party's knowledge.

These two dimensions are *always* examined by courts in determining liability in unconscionability cases. Further, they are the only two material dimensions. Narrower sub-dimensions within the procedural and substantive dimensions are not always discussed. For example, judges do not always mention *both* the complexity of the contract *and* the weakness of the non-drafting plaintiff when discussing procedural concerns. Judicial silence on sub-dimensions generates serious problems of incompleteness (and therefore non-comparability of cases) in our framework. Aggregation of these sub-dimensions allows us to by-pass problems of silence.²⁴ We stress that the material facts we aggregate into dimensions are related to each other: procedural concerns will increase in our model if there are marginal increases to *either* the complexity of the contract or the weakness of the plaintiff, both of which increase the plaintiff's cost of understanding their obligations under the contract.

C. Brief summary of our cases

v. *Mailcoups, Inc.*, 469 F.3d 1257 (9th Cir., 2006) where the court held that plaintiffs from California were not required to travel to Massachusetts to have their dispute resolved).

²⁴ If we use four dimensions, for example, we run into severe problems of missing data. If we break the procedural dimension into three material sub-dimensions (complexity of contract, weakness of plaintiff, and factors negating consent), we have “complete” data in only 100 of our 174 cases (57.47%). That is, there are only 100 cases where the court mentions all three of these sub-dimensions. Similarly, we *could* simply use one dimension – that is, the “concerns” raised by the judges. We note with interest that although the extent of inconsistency in our sample is reduced as we disaggregate the data, the *sources of inconsistency* – discussed in section V – appear to be invariant to the number of dimensions we choose.

We gather data on 174 decisions from the California Court of Appeal focusing on this narrow issue of law. Our search mechanism is outlined in *Appendix A*. We code variables of interest such as: whether the contract was deemed unconscionable, the date the judgment was delivered, the district from where the case was heard, whether the opinion was published, and whether the court affirmed or reversed the trial court.²⁵ We code the type of contracting environment in the case (e.g., employment contract, sales contract) as well as the political party of the governor who appointed the presiding judges.

Our first case is from 1977; however, cases are not distributed evenly over the 30 year sample.²⁶ The vast majority of the cases in our sample are from the last ten years (87.35% of all cases). The recent surge in the caseload perhaps reflects the increasing prevalence of arbitration clauses,²⁷ but also provides suggestive evidence that this narrow law is not settled.

Most of the contracts in our sample are either employment contracts (51.15%) or sales contracts of some form (48.28%).²⁸ We define sales contract broadly to include consumer claims, contracts for services (including medical services and education), and contracts between dealerships and manufacturers. Our definition of employment contracts includes contracts between a union and its members.

The background of our cases is relatively uniform. The non-drafting party signs an agreement to arbitrate (thus signing away the right to a judicial hearing) when starting employment or when the sale is made. Later in the relationship, the plaintiff files a complaint against the drafting party. For example, employees may claim sexual harassment or consumers may claim breach of contract. Once the dispute is filed, the defendant drafting party seeks to have the claim resolved by arbitration. The plaintiff claims that the dispute should be resolved in a court as the arbitration provision in the original contract is unconscionable and therefore, not enforceable.

The dichotomous result variable we focus upon is the determination of unconscionability. The court may decide to take further action once a

²⁵ All the trial decisions are adjudications of cases, not merely summary hearings.

²⁶ The issue of unconscionability in standard-form agreements had arisen before 1977 (see discussion of case law in Kornhauser (1976) for examples); however, these are not Californian cases that determine the unconscionability of arbitration clauses.

²⁷ See Marlotta-Wurgler (2006) and Woodward (2006) who both discuss the increasing prevalence of dispute resolution provisions.

²⁸ The other contract in our sample was a contract documenting the terms on which the parties were ending a personal relationship.

finding of unconscionability has been found,²⁹ but we are interested in whether the court enforces the arbitration clause *as written*. The decisions are split fairly evenly throughout the dataset, with 91 of our 174 cases (52.30%) finding that the provision is unconscionable.

III. Empirical methodology

A. Measuring the salient facts of the cases

We measure facts that relate to procedural concerns and substantive concerns in each case. Binary measures of the dimensions are not particularly helpful when measuring the court's appraisal of unconscionability concerns since we wish to observe the *degree* of procedural concern and the *degree* of substantive concern that the court is finding. Thus, we present a new methodology for describing the facts as they relate to the two dimensions.

We create a list of 312 key terms that describe factual situations relating to procedural and substantive concerns and we count the number of times these key terms occur in the written opinion. These key terms were chosen after reading published decisions.³⁰

We are not able to simply use each binary variable measuring the presence or absence of each particular key term as relevant dimensions to describe the facts because we would then have 312 dimensions and just 174 observations. Instead, we aggregate related terms from the written opinions of the judges, allowing us to generate two variables that describe the facts of the case: one variable measures the court's perspective of procedural concerns and the other measures the court's perspective of substantive concerns in each case.³¹ We create a score for each dimension m (procedural or substantive) in each case i , we create a score, $\theta_{mi} \in [0,1]$, that gives us a measure of the facts that suggest the court was concerned with each element.

After sorting the key terms into relevant dimensions (procedural and substantive), we further break the key terms into terms that suggest liability should be increased, c^+ , and terms that suggest liability should be decreased, c^- . For example, certain key terms used in written judgments suggest that the

²⁹ The court may find the entire contract unenforceable, they could sever the entire provision from the contract and order that proceedings be heard in a court, or they could sever an illegal part of the arbitration provision and still allow arbitration to proceed under different conditions to those specified in the contract.

³⁰ The full list of these key terms can be found in *Appendix B*.

³¹ We do not use the entire judgment. Rather we strip down the case such that we only capture the relevant facts of the case at hand, and not, for example, the facts of previous cases. Our methodology for extracting the facts of cases is discussed in detail in *Appendix C*.

court believes the contract was difficult for the non-drafter to read (e.g., “hidden”, “inconspicuous”, “fine print”) and therefore, indicate that procedural concerns are greater. We equate the presence of such terms with increasing the likelihood of liability (c^+). Similarly, we count certain key terms that suggest the court believed the contract was easier for the non-drafter to read and understand (e.g., “upper-case”, “underline”, “double spaced”) (c^-).³²

We use the count of these terms to create the following score for each dimension m for each case i :³³

$$\theta_{mi} \equiv \frac{c_{mi}^+}{c_{mi}^+ + c_{mi}^-}$$

The score for each dimension measures the proportion of all key terms relating to each dimension used that suggest the likelihood of liability increases. If the judge predominantly makes reference to terms relating to how difficult the contract was to read, or how weak the plaintiff was, or how the plaintiff was unable to give consent due to extenuating factors, the score mapping procedural concerns will be close to 1. If the judge predominantly mentions terms describing how easy the contract was to read, or how sophisticated the plaintiff was, or how the plaintiff was able to negotiate the terms of the contract at arm’s length, the score for procedural concerns will be close to 0.

We perform the same methodology counting the incidence of key terms relating to substantive concerns. The facts of each case i are therefore summarized by a vector x_i of two elements containing our two scores, both over the interval $[0,1]$, relating to procedural concerns and substantive concerns:

$$x_i \equiv (\theta_{pi}, \theta_{si})$$

B. An example of our methodology: *Blosser v. Sheibani*

In *Blosser v. Sheibani*, 2005 Cal. App. Unpub. Lexis 3461. (“*Blosser*”) the plaintiff, Anne Blosser, sued defendant cosmetic surgeon, Shane Sheibani

³² Negations of each of these terms (e.g., preceded by “no”, “not”, “lacks”, etc.) count against each score. That is, if a key term from our list falls within the count of c^+ terms is preceded by a negation, we instead include it in the count of c^- terms.

³³ To ensure that our results are not being distorted by the measurement of our score, we examine two alternative measurements. Our first alternative score uses the difference in raw numbers of our counts, $c^+ - c^-$. Our second alternative measure counts the key terms differently, scoring 1 point if the key term is used at least once irrespective of how many times the key term is used. There is no significant difference in the results found using the count described in \ref{lambda} and the results founds using the two alternatives.

M.D., after the plaintiff sought to have spots removed from her legs. The plaintiff was dissatisfied with the results and sued under various heads of action in contract and tort. The plaintiff had signed a written agreement before the surgery that stipulated disputes would be arbitrated and acknowledging that she gave up her constitutional right to a jury. The defendant sought to arbitrate the claims, but the plaintiff claimed the arbitration provision was unconscionable.

The court in this case was not greatly concerned by the procedural elements. Take, for example, the following paragraph (at 14-15):

“First, no surprise is shown. The arbitration agreement between Blosser and Sheibani is merely two pages, and the arbitration provisions are clearly set forth in standard type. In certain instances, the provisions are underlined, capitalized and/or highlighted. Each paragraph and subparagraph of the eight-paragraph agreement contains a line bearing Blosser’s initials, and she admits signing the arbitration agreement. No hidden term therefore exists.”

In this paragraph, we have eight key terms, underlined, that suggest low procedural concerns and no terms suggesting procedural concerns are high. If these were the only mentions of key terms relating to procedural concerns, the score for procedural concerns for this case would be 0. The court outlined other factors that made it easy for the plaintiff to understand what rights were being waived. Indeed, there are 36 references to factors that suggest the procedural concerns are low in the written judgment. There are many further references to the fact that she “accepted”, “agreed”, “understood” or “understands” the provision, and that she had “signed” and “initialed” the agreement.

On the other hand, the court makes reference facts that negate the consent given by the plaintiff. Although the plaintiff signed the agreement and initialed the appropriate boxes, the court was not presented with evidence suggesting the plaintiff could negotiate or bargain. Further, the plaintiff felt she was required to sign the contract. We have 10 terms that suggest the procedural concerns are present here. The court references the fact she felt she was “forced” to sign, she could “not negotiate”, the appearance of “asymmetry”, the “adhesive” nature of the “standardized”, “preprinted” contract, and the “silence” of the doctors are all factors that suggest an increase in the likelihood of liability.

There are 46 key terms mentioned by the court relating to procedural concerns. Only 10 of them however suggest procedural concerns are high. Therefore, our score for procedural concerns in the *Blosser* case is:

$$\theta_p \equiv \frac{c_p^+}{c_p^+ + c_p^-} = \frac{10}{46} = 0.22$$

The substantive score in *Blosser* is 0.46. The court noted that there is a strong degree of mutuality in the provision. The court notes that the fact that the arbitration provision does not explicitly refer to costs of arbitration would not, by itself, be a ground for not enforcing the provision. One aspect of the appeal mechanism was deemed to confer an unfair, unilateral benefit to the defendant. We count seven key terms suggesting that the substantive concerns are low, such as references to the “mutual” nature of the contract and the fact that “all disputes” would be heard by the arbitrator, not just those brought by the patient. There are, however, six terms suggesting high substantive concerns. The court refers to “unilateral” and the “costs of arbitration”. Therefore, our score for substantive concerns in this case is:

$$\theta_s \equiv \frac{c_s^+}{c_s^+ + c_s^-} = \frac{6}{13} = 0.46$$

Our methodology indicates a vector position of $x_{Blosser} = (0.22, 0.46)$ for the *Blosser* decision. We plot each case on a 2x2 map. The example of *Blosser* is shown in **Figure 1**. The dark red color of the *Blosser* vector indicates that the court did not enforce the arbitration provision as written. (We represent cases where the contract *is* enforced with light green in subsequent figures.) In our dataset, the dummy variable *unconscionable*, is therefore coded 1 for the *Blosser* case.

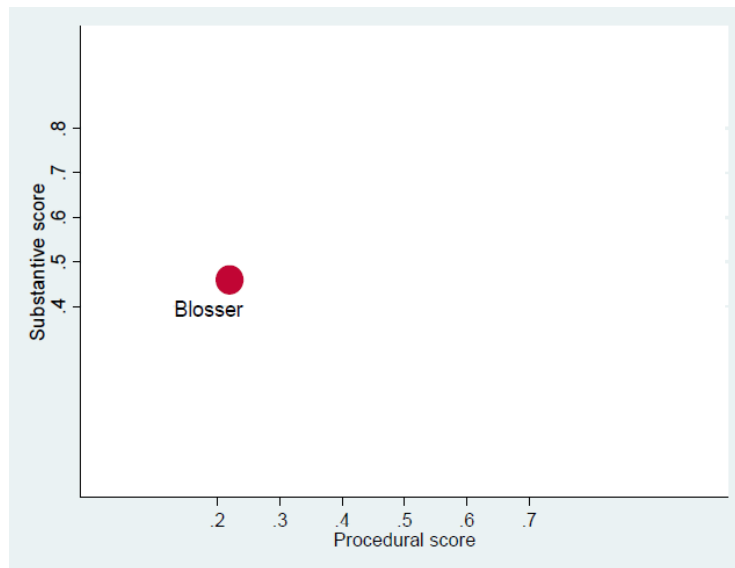


FIGURE 1: The fact vectors of each case are plotted on a 2x2 map. The example of *Blosser* is shown. The procedural score is 0.22. The substantive score is 0.46. We represent *Blosser* with a dark red circle indicating the arbitration provision here was *not* enforced as written.

C. Quality of measurement

We believe this to be a strong measure of the level of procedural concerns and substantive concerns that emanate from the facts. We simply measure the facts that the court has opted to explicitly discuss in the written opinions. The scores give us a concise description of how strongly the court viewed procedural concerns and how strongly the court viewed substantive concerns. Sometimes courts make explicit reference to the levels of procedural and substantive concerns. We can informally test how precise our measures are by examining these instances. Take, for example, the case of *Wilson v. Bally Total Fitness Corp., Inc.*, 2003 Cal. App. Unpub. Lexis 5892 where the court explicitly stated that the plaintiff employee had not presented much evidence that the contract was procedurally unconscionable. The court noted that the plaintiff's "slight showing of procedural unconscionability" required "a greater showing of substantive unconscionability" in order to support a finding of unconscionability (at 11). The court felt the plaintiff did so satisfactorily. Our scores strongly mirror this: our procedural score is quite low (0.33), while our substantive score is very high (1.00). The procedural concerns for this case compared the entire are below the mean, while the substantive concerns are above the mean.

Nonetheless, we nonetheless recognize that our measure of salient facts is by no means perfect. Providing an objective measure of the procedural and substantive concerns of each case is simply not possible. The imperfections we lay out here generate noise in our measurement of facts—which, no doubt translates into noise when trying to detect inconsistencies between cases.

First, judges may have a degree of fact discretion—judges may selectively cite facts that support their finding. For example, if in *Blosser* the judge who wrote the opinion was selecting facts that supported the finding of liability on behalf of the defendant, we would expect that the objective facts would be more favorable to the plaintiff. This would mean that an objective measure of procedural and substantive concerns would be even lower—the vector would be closer to the (0,0) origin.

Problems may arise from the fact that some judges are more loquacious than others. For example, take the same case decided by two different judges: the first is a loquacious judge who discusses the facts of the case in great detail. Compare this to a second judge who makes scant reference to the facts, merely noting a couple of key terms. The proportional scores *may* be different.³⁴ Such problems could be endogenous, as judges may be more loquacious if the decision is inconsistent with precedent. However, below in section V we ask whether loquacity (as measured by the number of

³⁴ Our measure is immune from proportionally scaling; e.g., repeating the facts. If we measure if each word is used—rather than the count of the words—our results in section IV do not change substantially.

key terms used in the judgment) is correlated with conflict. We find no significant correlation.

Another problem is that our assumptions about aggregation and ranking may not be reflected in our search terms. Our methodology will not perfectly separate substantive factors from rhetoric. For example, all judges may rank elderly plaintiffs as “weaker” than migrant plaintiffs. While our measure would not differentiate between the two if the only change was the use of the key terms “elderly” or “migrant”, we might expect the judge writing an opinion that highlights the weaknesses of the elderly plaintiff to perhaps include other key terms such as “incapable” or “unequal”. These terms may help to differentiate between the two sets of cases. There may be other problems that arise because of the types of words that judges use. We have attempted to minimize these problems wherever possible.³⁵

We adjust our scores by 1% and 5% to provide robustness checks in Section V to ensure that our results on the sources of inconsistency are not driven by such problems of noise and mis-measurement of data.

D. Comparing our measurement of facts and outcomes

We find very strong positive correlation between our scores of procedural and substantive concerns and a finding of unconscionability. **Figure 2** illustrates the relationship using a scatter-plot diagram mapping the facts related to procedural concerns and substantive concerns for each of our cases. As expected, if the facts suggest greater procedural concerns or greater substantive concerns, the likelihood of the provision being found unconscionable increases. That is, on average, the vector positions of cases where the arbitration provision was held to be *not unconscionable*, represented by light green dots, tend to be closer to the (0,0) origin. Vector positions of cases where the arbitration provision was held to be *unconscionable*, represented by dark red dots, tend to be closer to the (1,1) origin. The decisions however have not separated perfectly.

³⁵ For example, courts may discuss the ability of a non-drafting party to “distinguish” the arbitration provision from the rest of the contract. We do not include the key term “distinguish” for obvious reasons. Similarly, the phrase “italics” may connote that the arbitration provision in the contract is italicized (having a similar affect as underlining or boldface); however, given that judges commonly italicize for emphasis and state that the italics are their own, we cannot include this term in our search. Other problems such as double and triple negatives are difficult to anticipate, as are spelling errors in the written judgment.

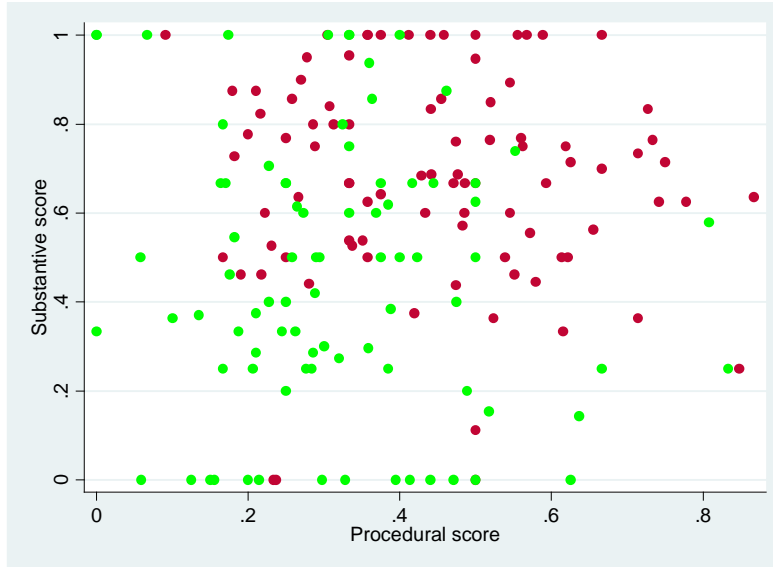


FIGURE 2: Scatter-plot diagram illustrating the vectors of facts relating to procedural concerns and the facts relating to substantive concerns in cases where the provision was held to be not unconscionable (light green dots) and those where it was held unconscionable (dark red dots).

In line with the methodology of the fact-pattern analysis literature, we run *probit* regressions to examine correlation. Our specification is as follows:

$$\Pr(\text{unconscionable}_i) = \alpha + \beta \cdot \text{Proc}_i + \gamma \cdot \text{Sub}_i + \epsilon_i$$

where Proc_i and Sub_i are measure of procedural concerns and the measure of substantive concerns in case i . **Table 1** confirms that increases the *procedural scores* and *substantive scores* both exhibit extremely strong positive correlation with findings of unconscionability (in both univariate and multivariate regressions).

VARIABLES	(1) <i>unconsc</i>	(2) $\Pr(\text{unconsc})$	(3) $\Pr(\text{unconsc})$	(4) $\Pr(\text{unconsc})$
Procedural score		1.0592*** (0.2338)		1.1532*** (0.2517)
Substantive score			0.7544*** (0.1467)	0.8118*** (0.1572)
Constant	0.5230*** (0.0380)			
Correctly predicted outcomes	52.30%	62.64%	67.82%	75.86%
Observations	174	174	174	174

TABLE 1: Regressions illustrating the effects of an increase in procedural concerns and substantive concerns. Specification (1) is an OLS regression on a constant. Specifications (2), (3), and (4) are *probit* regressions.

We predict the result of cases under each of our specifications. We interpolate a probability of a finding of unconscionability in each case and predict plaintiff victory if the predicted probability exceeds 50%. Our simple scores in the two dimensions perform quite well in predicting the correct result. Using our two scores only, our model predicts the correct result in 75.86% of cases.

Our model far out-performs other simple baseline models that do not use measures of fact. Compare, for example, a predictive model that predicts the result by regressing on a constant. This simple model predicts the correct outcome in just 52.30% of cases—not significantly different from randomizing predictions. Other simple regressions do not yield significantly higher successful rates of prediction. For example, regressing on *year* predicts the correct outcome in 54.60% of cases, and the politics of the bench *alone* correctly predicts just 55.75%. Using the individual measures of procedural and substantive concerns by themselves, the correct result will be predicted in 62.64% and 67.82% of cases respectively.³⁶

However, merely because cases are not correctly predicted by the *probit* model does not necessarily mean that we have inconsistently-decided cases. To gather a more accurate representation of the extent of inconsistency we need to compare cases in a time sequential pair-wise fashion. This is the approach we take in section IV.

IV. Results: pairwise comparison of cases

A. Identifying inconsistently-decided cases in our sample

When are cases inconsistent? We provide a simple framework. First, the case must be **determined** by the precedent. If the case is determined by the precedent and the outcomes of the two cases are different, then we say that the case and the precedent are **inconsistent**. Examples of determined sets and inconsistency are shown in **Figure 3**. There are two situations where the case *B* is determined with the precedent *A*:

- If the precedent with facts x_A held the contract provision to be *not unconscionable* and the case at hand with facts $x_B \leq x_A$ held the contract provision *unconscionable* (**left panel**);

³⁶ If we predict the results of cases using a measure of concern that has just one dimension (that is, collapsing the procedural and substantive concerns into one measure of “concerns”), we again get a strongly significant coefficient ($z = 6.11$) and we are able to predict 69.54% of cases correctly.

- If the precedent with facts x_A held the contract provision *unconscionable* and the case at hand with facts $x_B \geq x_A$ and held the contract provision *not unconscionable* (**right panel**).

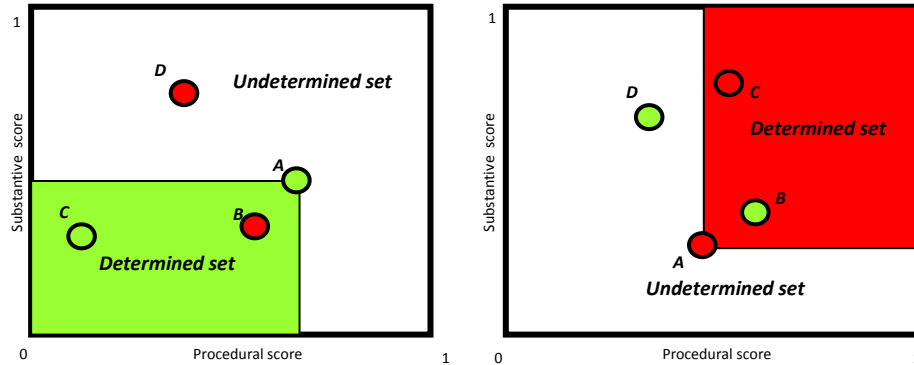


FIGURE 3: In the left panel, precedent *A* was not unconscionable. In the right panel, precedent *A* was unconscionable. The set of factual situations that are determined by the precedent are shown for each panel (“determined set”). In both panels, cases *B* and *C* fall within the determined set. Case *B* has a different outcome to precedent *A*. Case *B* is inconsistent with precedent *A*. Case *C* is consistent with precedent *A* since the case and precedent have the same outcome. While case *D* has a different outcome to precedent *A*, the case does not fall within the determined set, so we cannot make a judgment on whether the two cases are inconsistent.

B. Examples of inconsistently-decided cases in our sample

We now provide examples of inconsistency using actual cases from our dataset. Recall our discussion above of *Blosser*. In spite of apparent low-level concern, both procedurally and substantively, the court found in favor of the plaintiff and refused to enforce the arbitration provision as written. Compare that case with a case decided one year earlier: *Fletcher v. Quest Education Corp.*, 2004 Cal. App. Unpub. Lexis 2904 (“*Fletcher*”).

In *Fletcher*, plaintiff students sued a vocational school for violations of statutory rights. The defendant argued that the claim should be arbitrated under the terms of an arbitration agreement which was signed by the plaintiffs upon registration. As with *Blosser* the procedural concerns were mild. The agreement was a two-page pre-printed form that stated that disputes will be arbitrated by a neutral arbitrator. Unlike *Blosser* however, the arbitration provision was not capitalized or set in bold type. It was set in the same type at the rest of the agreement. Although the students were required to initial other boxes in the agreement, there was no box that students could initial to indicate having read and understood the arbitration provision. The procedural score for this case is 0.33. By our measure the procedural concerns in *Fletcher* are greater than in *Blosser*.

Similarly, our scores show that there are greater substantive concerns than in *Blosser*. Unlike *Blosser*, the arbitration provision here curtailed the plaintiffs' rights to consolidate suits and required them to pay upfront costs of arbitration. However, these concerns were tempered by the fact that the dispute will be consistent with American Arbitration Association rules and the fact that no evidence was presented that the students could not afford the costs of arbitration. By our count, the score for substantive concerns is 0.75. Once again, this is higher than in *Blosser*.

In our framework, *Blosser* fell within the “determined set” of *Fletcher*. The *Fletcher* court held the provision to be not unconscionable and our measurement of the concerns, $x_{Fletcher} = (0.33, 0.75)$, dominate the concerns raised by the court in *Blosser*, $x_{Blosser} = (0.22, 0.46)$. In spite of having both a higher procedural score and a higher substantive score than *Blosser*, the Court of Appeal in *Fletcher* found in favor of the defendants: the provision was held to be not unconscionable. In our framework, the *Blosser* case is decided inconsistently with the precedent case, *Fletcher*. This inconsistency is shown graphically in the left panel of **Figure 4**.

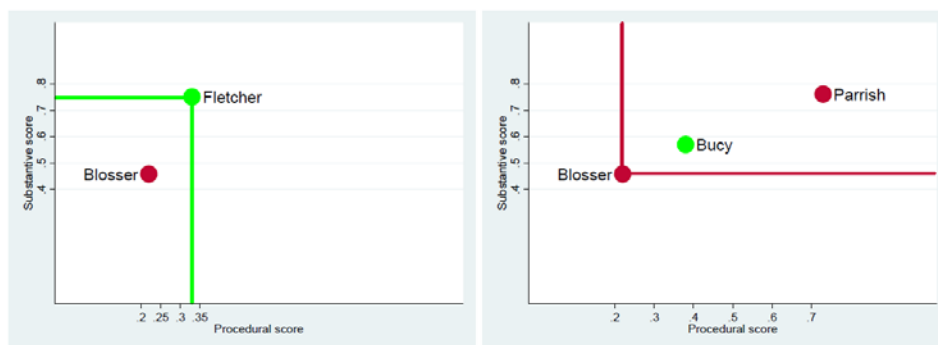


FIGURE 4: Examples of inconsistent cases in our dataset. The left panel shows *Fletcher* (where arbitration provision was not unconscionable) and *Blosser*, which fell within the determined set of *Fletcher* and held that the contract provision was unconscionable. These cases are inconsistently-decided in our dataset. The right panel shows *Blosser* and two cases that fall within its determined set: *Bucy* (inconsistent with *Blosser*) and *Parrish* (consistent with *Blosser*).

Once *Blosser* was decided, subsequent cases fell within *Blosser*'s determined set (where procedural concerns are greater than or equal to 0.22 and substantive concerns are greater than or equal to 0.46). We examine two such cases.

The first case we examine, *Parrish v. Cingular Wireless LLC*, 2005 Cal. App. Unpub. Lexis 9021 (“*Parrish*”), is consistent with *Blosser*. Procedurally, the court noted that the plaintiff agreed, read, and signed the original contract, but placed heavier emphasis on the fact that the bill insert was a contract of adhesion that modified the rights of the plaintiff and gave Cingular an advantage over the plaintiff. The procedural score by our count is 0.73. Substantively, the court made many references to the fact that the plaintiff's right to class actions had been curtailed, but this was mitigated somewhat by

the fact that arbitration covered all disputes (including those of Cingular) and were to be consistent with AAA rules. The substantive count is 0.76. Since the fact vector here was $x_{Parrish} = (0.73, 0.76)$, this case was therefore determined by *Blosser*. As in *Blosser*, the court held the arbitration provision unconscionable. Therefore, this case is consistent with *Blosser*.

The second case we examine, *Bucy v. AT&T Wireless Services, Inc.*, 2005 Cal. App. Unpub. Lexis 4368 (“*Bucy*”), is inconsistent with *Blosser* by our measure. Here, plaintiff customers challenged the imposition a fee by their wireless service provider. Unlike *Blosser*, the court did not focus heavily on the complexity of contract. The procedural score comes largely from the fact that the court discusses that this is a contract of adhesion but also made references to what the plaintiffs knew, initialed, and signed. The procedural concerns were not great, reflected by the low score, 0.38. Substantively, the court weighed up the fact that the rights to class actions were curtailed against the fact that the clause was bilateral in that it required arbitration of all disputes (including those of AT&T), and the clause noted that some debt claims may qualify for hearing by small claims tribunal. The case fell within the determined set of *Blosser* since the fact vector was $x_{Bucy} = (0.38, 0.57)$. However the provision in *Bucy* was held to be not unconscionable, and therefore *Bucy* is inconsistent with *Blosser* in our framework. The vectors of *Bucy* and *Parrish* are illustrated in comparison to the determining precedent *Blosser* in the right panel of **Figure 4**.

C. Time sequential pair-wise comparison dataset

We design a dataset where each observation is a pair-wise comparison of a case with a precedent. We ask whether the case at hand falls within the determined set of each previously-decided case. To provide background meaning for our results we present an example of what our dataset would look like if we had only the four cases shown in **Figure 5**.

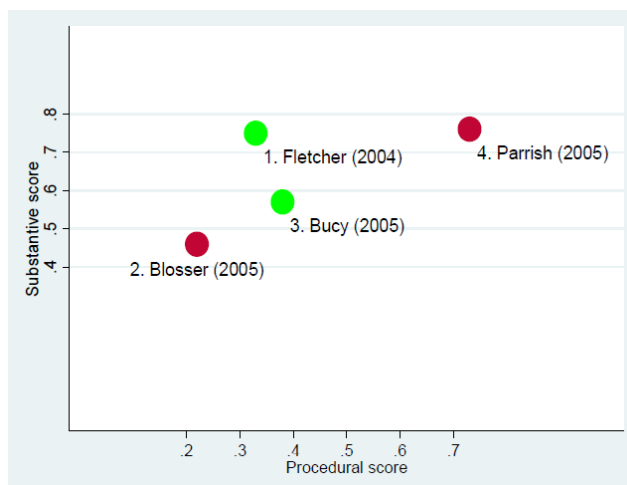


FIGURE 5: Four cases that we use for our illustrative example for our pair-wise comparison dataset.

The cases fall in the following order: *Fletcher* (not liable), *Blosser* (liable), *Bucy* (not liable), and finally, *Parrish* (liable). The pair-wise comparison dataset for this example will have six observations comparing each case at hand with each precedent case. This example dataset is shown in **Table 2**.

Case at hand	Precedent	Determined?	Inconsistent?
<i>Blosser</i>	<i>Fletcher</i>	Yes	Yes
<i>Bucy</i>	<i>Fletcher</i>	No	--
<i>Bucy</i>	<i>Blosser</i>	Yes	Yes
<i>Parrish</i>	<i>Fletcher</i>	No	--
<i>Parrish</i>	<i>Blosser</i>	Yes	No
<i>Parrish</i>	<i>Bucy</i>	No	--

TABLE 2: Pair-wise comparison dataset for our example of four cases.

Of the six observations in this example pair-wise comparison dataset, three have cases that are “determined” by precedent (*Blosser-Fletcher*), (*Bucy-Fletcher*), and (*Parrish-Blosser*). Two of the three pairs are inconsistent (66.67%).

Our example with four cases illustrates why the order in which cases were decided is important. If the order of cases were different, we may get a different finding on the level of inconsistency. For example, imagine that the same cases arise but the cases fall in the following order: *Fletcher*, *Bucy*, *Parrish*, *Blosser*. Performing regression analysis would yield exactly the same predicted rule. But in this example, only two of our six observations have determined pairs (*Blosser-Fletcher*) and (*Blosser-Bucy*) and both of these pair-wise observations are inconsistent (100% inconsistent determined pairs). If we ignore the order in which cases arise, then we may misrepresent the extent of inconsistency.

D. Extent of inconsistency in our dataset

We apply this methodology to all 174 cases in our sample. Comparing each case at hand with all precedent cases generates a pair-wise comparison dataset of 15,023 observations.³⁷ Of these observations, we have **2,549** determined pairs (where the precedent case determines the case at hand). There is conflict in **611** of these pair-wise combinations (**23.97%**). That is, our

³⁷ In theory we should have $n.(n-1)/2$ observations in our pair-wise dataset, which would yield 15,051 observations. However, some cases are heard on the same day. We do not count these concomitantly-decided cases in our pair-wise comparison dataset as the “precedent” case cannot be identified. Along the same lines, we also perform the analysis below using various levels of “delay”. That is, cases heard within 30 days of each other are not compared because of the potential for a time lag. Adjusting our dataset using delays of 30, 60, and 180 days do not substantially change our results.

pair-wise comparison dataset suggests that just under one quarter of our determined pairs exhibit inconsistency.³⁸

The pair-wise comparison dataset weights the extent of inconsistency by the number of precedents that determine a case at hand. For example, *Blosser* was decided in April 2005 and fell within the determining sets of 16 precedents. Each of these precedents held the provisions to be not unconscionable, however *Blosser* decided the provision was unconscionable. All 16 observations where *Blosser* is the case at hand in our dataset indicate inconsistency. Compare this to *Parrish*. This case was determined by 39 precedents, all of which held the provision unconscionable. *Parrish* was consistent with all 39 precedents.

We perform robustness checks on our data by adjusting each of our vectors by 1% and 5% to address problems of noise. For each case finding the contract *not unconscionable*, we push the vector position of each toward the (0,0) origin, and for each case finding the contract *unconscionable* we push the vector position toward the (1,1) origin. Such measures have the effect of reducing the level of inconsistency. If we allow a buffer of 1%, the extent of inconsistency falls to 20.23%, while if we allow a buffer of 5%, the inconsistency falls to just 12.95%. This suggests that a large extent of the inconsistency we find occurs around the boundary of liability. This is illustrated informally in **Figure 2**, and is a result we establish more formally below in section V.

V. Sources of conflict

What can we say about the 611 pairs of determined cases that exhibit inconsistency? What is different about these pairs compared to the 1,938 pairs of determined cases that are decided consistently? We use a *probit* regression to examine whether various factors are significant upon the probability of case at hand i conflicting with determining precedent k . Our model is specified simply:

$$\Pr(\text{conflict}_{ik}) = \alpha + \beta \cdot X_{ik} + \varepsilon_{ik}$$

where X_{ik} is a set of independent variables that compare features of the case at hand, i , to those in the precedent case, k . Our results are summarized in **Table 3**.

³⁸ If we were to collapse our measurements of the “concerns” into *one* dimension (i.e., instead of having procedural and substantive concerns, just focus on all concerns), then we would have inconsistency in 29.48% of our determined pairs (of which there are far more). We note with interest that sources of inconsistency, described in detail in section V, are the same when we use just one dimension.

“Easy” cases and “hard” cases

“Easy” cases—those where the facts are close to either origin—do not generate the vast degree of inconsistency in the law. If the facts suggest procedural concerns and substantive concerns are low, we see judges enforce the contract. If the facts suggest procedural concerns and substantive concerns are high, judges do not enforce the contract. However, the closer we move toward the boundary of liability, the “harder” the case is, the greater the likelihood of conflict. We measure proximity to boundary very simply. We simply sum the horizontal and vertical distances from the vectors to the nearest origin to yield a statistic that proxies how easy or how contentious the case is.³⁹ Unsurprisingly, given our findings in section III, this is found to be extremely significant—with significance at the 0.01% level—even when controlling for other factors. The coefficients in our regression analyses in **Table 3** can be interpreted quite easily. In specification (1), for example, a deviation away from the origin of 1 (e.g., moving from (0, 0) to (0.5, 0.5)) increases the likelihood of inconsistency with any given precedent by about 85%.

The question then becomes: what explains the inconsistency once we control for how “hard” a case is? The main factor is the conflicting ideology of the benches in the two cases. Other factors—such as contractual environment, time, district, affirmation or reversal, and loquacity of the writing judge—are not significant drivers of conflict in our dataset.

Political ideology of the benches

Conflicting political ideology appears to drive inconsistency in “hard” cases. We assume conservative judges prefer to uphold contracts and liberal judges prefer to protect non-drafting party by not enforcing the contract. We assume Republican governors appoint conservative judges and Democratic governors appoint liberal judges.⁴⁰ Our cases are heard by 165 different judges who hear cases in panels of three. We measure conflicting political ideology

³⁹ If we break our distance metric into two and control for the distance of each element from the origin, we find both are highly significant, and our results do not change significantly. We have reported the distance as one statistic in **Table 3** for simplicity.

⁴⁰ We measure political affiliation of each judge by coding the party of the California governor that appointed the judge. We recognize that this is not a perfect measure of political ideology; however, locating other measures of political ideology for all judges on state Court of Appeal benches is problematic. Political scientists have been somewhat critical of the use of appointing President as a proxy for the political ideology of federal judges as being too simplistic (see e.g., Epstein and King (2002)). For further discussion of the debate see Heise and Sisk (2005). With regards to arbitration hearings specifically, see Ware (1999) who finds politics to be a significant driver of similar decisions in Alabama.

with a simple dummy variable: if the panel in the case at hand is more conservative than the panel in the determining precedent and the precedent held the provision unconscionable, then our dummy variable takes the value 1; or if the panel in the case at hand is more liberal than the precedent panel and the determining precedent enforced the contract, then the variable takes the value 1. In all other environments, the dummy variable takes the value 0. Controlling for the facts of the cases, conflicting politics is a strong source of inconsistency in our data. Cases are more likely, at the 1% level, to conflict with determining precedents when the ideology of the panels conflict. Again, the coefficients in **Table 3** can be interpreted easily. If the benches have conflicting ideology, we are about five to six per cent more likely to see inconsistency than if we do not have conflicting ideology.

Value of precedent

We use a number of variables attempting to capture the value of precedent. The only variable we find that is significantly correlated with inconsistency is whether or not the precedent was published (*Published precedent*). In California, Court of Appeal cases may be selected for publication if they exhibit “new” law or modify, explain, or criticize existing laws.⁴¹ If a precedent is not published by the Court of Appeal, then we are likely to see greater inconsistency. Controlling for other factors, the fact that a precedent is not published increases the likelihood of inconsistency by about three per cent (see specifications (2) and (3) of **Table 3**.) The fact that the decision in the case at hand is published (*Published case at hand*) does not significantly influence the extent of inconsistency.

Other factors that may affect how valuable a precedent is do not appear to drive inconsistency in our dataset. As an example, the fact that the precedent involved a consumer contract while the case at hand involves an employment contract (*Different contracting environment*) does not significantly correlate with inconsistency.

If the same judge on both panels we hypothesize that the panel in the case at hand may be more likely to follow that precedent (*Same judge*). This occurs in 688 of our case-precedent pairs (4.23% of the entire sample). While the direction of the coefficient is as expected; surprisingly, no significant effect is found. Similarly, cases decided in the same district as a precedent are not significantly more likely to be consistent than cases decided in different districts to the precedent (*Same district*).⁴²

⁴¹ See Rule 8.1105, 2008 California Rules of Court.

⁴² The California Court of Appeal is divided into six “districts” by geographical region. The districts do not have any added significance for precedents, however if the districts of California are heterogeneous, then perhaps different districts apply the same law inconsistently. Nearly one-quarter of all our case-precedent pairs (3,679 pairs; or 23.18%) were heard in the same district.

Arguments in line with Cardozo (1921) and Kornhauser (1989) suggest that the value of precedent should diminish as the common law should remain flexible to reflect changes in information and changes in social values.⁴³ Such depreciation leads to a situation that may appear as conflicting decisions; however, only recent cases may constitute good law. An alternative hypothesis suggests that long-standing precedents may be more revered. We measure this variable by simply measuring the length of time from the date the precedent was delivered to the date that the case at hand was delivered (*Difference in time between cases*). Our data fails to confirm either hypothesis. The length of time between cases is not a significant source of conflict.

One might hypothesize that the number of determining precedents will influence the likelihood of following precedent: more precedents should increase the cost of defying that precedent; however, this has no significant effect upon inconsistency in our dataset (*Number of precedents*).

Table 3 shows that our results are robust to differences in judicial loquacity and whether the Court of Appeal affirms or reverses the trial court decision (see specification (3)). We noted above that the loquacity of judges may bias the extent of conflict. We measure “loquacity” by summing the number of key terms found in the judgment. Loquacious judges may be more likely to discuss factors on both sides and therefore will bias the vector position towards the boundary of liability. However, our results in **Table 3** suggest that the number of key terms used does not significantly affect the likelihood of conflict in our data.

We explore whether our results are sensitive to small changes in measurement. In line with our discussion on correcting for noise, we allow a buffer of 1% (specification (4)) and 5% (specification (5)). The result that inconsistency only arises in “hard” cases remains very strong; as does the result that conflicting political ideology drives inconsistency in these hard cases. However, the publication status of the precedent is no longer a significant driver of inconsistency—which casts doubt on the robustness of this result.

⁴³ Landes and Posner (1976) and Hansford and Spriggs (2004) both examine this empirical question with regard to citations, finding that the stock of legal capital does indeed depreciate over time.

VARIABLES	(1) Pr(Conflict)	(2) Pr(Conflict)	(3) Pr(Conflict)	(4) Pr(Conflict) 1% Noise allowed	(5) Pr(Conflict) 5% Noise allowed
Proximity to boundary	0.8563*** (0.0868)	0.8722*** (0.0706)	0.8866*** (0.0646)	0.5615*** (0.0754)	0.1830*** (0.0610)
Conflicting politics	0.0600*** (0.0181)	0.0578*** (0.0172)	0.0576*** (0.0177)	0.0291** (0.0122)	0.0136** (0.0062)
Difference in time		-0.0007 (0.0014)	-0.0006 (0.0014)	-0.0001 (0.0009)	0.0000 (0.0004)
Different contracting environment (sales, emp't)		-0.0062 (0.0114)	-0.0045 (0.0121)	-0.0158 (0.0103)	-0.0028 (0.0032)
Same judge		-0.0180 (0.0339)	-0.0160 (0.0357)	-0.0009 (0.0260)	0.0076 (0.0118)
Same district		0.0261 (0.0277)	0.0260 (0.0283)	0.0026 (0.0107)	-0.0006 (0.0034)
Number of precedents		0.0004 (0.0006)	0.0005 (0.0007)	0.0003 (0.0007)	0.0002 (0.0002)
Published case at hand		-0.0049 (0.0154)	-0.0042 (0.0159)	-0.0090 (0.0117)	-0.0014 (0.0041)
Published precedent		-0.0318* (0.0174)	-0.0338* (0.0180)	-0.0148 (0.0115)	-0.0003 (0.0053)
Number of key terms			-0.0002 (0.0003)	0.0002 (0.0002)	-0.0000 (0.0001)
Affirm decision of lower court			-0.0342 (0.0275)	-0.0129 (0.0159)	-0.0074 (0.0064)
Observations	2549	2549	2549	2487	2788

Robust standard errors in parentheses (Clustered at the precedent level)

*** p<0.01, ** p<0.05, * p<0.1

TABLE 3: Sources of inconsistency.

To summarize, the strongest indicator of conflict is how “hard” the case is: the closer that a case is to the boundary of liability, the greater the likelihood of inconsistency. Once we control for facts, we find that the strongest source of conflict is whether the political ideology of the panels conflicts. A less robust result stipulates that if a precedent decision is not published, this increases the likelihood that conflict in the law will arise. Surprisingly, none of our other hypothesized influences on conflict, such as same-judge bias or the difference of time between cases, are significant indicators of conflict.

VI. Conclusions

Appellate courts are given a great deal of leeway and discretion in deciding cases. In the particular sphere we investigate, such discretion has manifested itself in conflicting legal decisions. The unconscionability doctrine is a fertile source of seemingly inconsistent decisions in California. In just under one-quarter of the cases where the facts of the case appear to be determined by precedent, the decision is not consistent with the precedent. Judges in California appear to disagree about the appropriate level of procedural and substantive concerns that should render an arbitration provision in a standard-form contract unconscionable and the operation of precedent does not appear to constrain judges greatly in this particular common law doctrine—particularly in “hard” cases where the facts render the case near the boundary of liability. Controlling for the facts of the case, the most significant indicator of conflict between a case and a precedent is whether the politics of the two benches conflicts.

We conclude by noting that our contribution should be far from the final word on the issue of when judges decide cases inconsistently with precedent. The doctrine of unconscionability is a somewhat vague and fuzzy standard. Generalizing from our results to a broader conclusion that all common law doctrines exhibit similar levels of inconsistency would be extremely premature. Many laws are largely based around evaluations of standards rather than explicit threshold rules and our framework could easily be applied to other areas of commercial law. The framework we have presented may enable further research opportunities, such as isolating judicial preferences over precedent adherence. Our empirical framework cannot perfectly capture inconsistencies and contains a number of simplifications. This noise may overstate the degree of inconsistency we find. Nonetheless, our methodology has significant advantages over existing methods of analyzing inconsistency in the law and we believe it captures essential aspects of the phenomena of inconsistently-decided cases.

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Appendix A

Construction of database (a): Search strategy

All data are obtained from *LexisNexis*. To find the cases, we searched for state appeals court cases decided prior to February 18, 2008 that satisfy all the following criteria: (1) either of the terms “contract!” or “agree!”; and (2) the wild-card “unconscionab!”; and (3) the wild-card “arbitrat!”; and (4) any of the following terms – “standard-form”, or “standard form” , or “boiler-plate”, or “boiler plate”, or “adhesi!” – are found in either the *Overview* OR the *Core Terms*.

The first criterion restricts our analysis to contract law cases. The second criterion seeks to limit our search to those cases where unconscionability was the primary doctrine under consideration. The third restriction limits the type of clause that we are analyzing, so that we are not including unconscionability cases that involve illegal disclaimers or excessive pricing. The fourth criterion limits our search to cases where the contract is a standard form contract. The use of the wild-card “adhesi!” here captures the use of the label “contracts of adhesion” and “adhesive contract” here – labels commonly used by judges to describe standard-form contracts. The *Overview* is a summary of the case of approximately 150 to 200 words. The *Core Terms* is a list of 30 to 50 key terms that appear in the decision. This search strategy captures all state appeals cases from all states.

This search yielded exactly 500 cases from all the states. We then restrict our analysis to the 199 cases decided in California. Of these, 18 did not make any findings on unconscionability of an arbitration provision under California law, and therefore could not be included in our dataset. This is because unconscionability was merely discussed by the court in the context of another claim, or perhaps the court decided not to issue a finding on unconscionability. Cases decided in California that do not use California law are also removed. Of the remaining 181 cases, 7 were from the Supreme Court and 174 were from the Court of Appeals.

Appendix B

Construction of dataset (b): 312 key terms

PROCEDURAL CONCERNS						SUBSTANTIVE CONCERNS	
Complexity of the contract		Weakness of non-drafter		Negation of consent			
Pr(liability) increase	Pr(liability) decrease	Pr(liability) increase	Pr(liability) decrease	Pr(liability) increase	Pr(liability) decrease	Pr(liability) increase	Pr(liability) decrease
<p>One point for each mention of:</p> <ul style="list-style-type: none"> • ambiguity • ambiguous • ambiguously • boiler plate • boilerplate • buried • bury • complicated • conceal • confuse • confused • confuses • confusing • difficulty • disguise • disguised • disguises • fine print • fine-print • handbook • hidden • inconspicuous • inconspicuously • jargon • legalese • minuscule • miscellaneous • page(s) (if accompanied by words suggesting there are many pages) • pre printed • preprinted • prolix • same type • shrink wrap • shrink-wrap • shrink wrapped • shrink-wrapped • single space • single spaced • single-space • single-spaced • small • standardized • surprise • tiny • unclear • unintelligible • vague • verbiage 	<p>One point for each mention of:</p> <ul style="list-style-type: none"> • bold • bold-print • capitalize • capitalized • capitals • clear agreement • clearly states • conspicuous • conspicuously • different font • double space • double spaced • double-space • double-spaced • important • large font • ordinary • page(s) (if accompanied by words suggesting that there are few pages) • plain language • prominence • prominent • separate page • straightforward language • unambiguous • unambiguously • underline • underlined • upper case • upper-case 	<p>One point for each mention of:</p> <ul style="list-style-type: none"> • advantage • advantaged • advantageous • advantageously • advantages • aged • asymmetric • asymmetry • disparate • disparity • elderly • emigrant • emigrate • emigrated • foreign • foreigner • ill health • ill-health • illiterate • immigrant • immigrate • immigrated • inability • incapability • incapable • inequality • inequitable • inferior • mentally • migrant • migrants • migrate • migrated • old • poorly • sick • Spanish • strength • strong bargaining • superior bargaining • terminally • uneducated • unemployed • unequal • unsophisticated • weak • young 	<p>One point for each mention of:</p> <ul style="list-style-type: none"> • businessman • businesswoman • capability • capable • educated • education • equal bargaining • equity • literate • professional • sophisticated • sophistication 	<p>One point for each mention of:</p> <ul style="list-style-type: none"> • adhere • adhesion • adhesive • bill insert • bill stuffer • coerce • coercive • deceive • deceived • deceptive • duress • force • forced • hurried • hurry • impose • imposed • imposition • induce • induced • involuntarily • involuntary • mislead • misleading • misled • misrepresent • misrepresentation • misrepresented • mistake • mistook • misunderstand • misunderstanding • misunderstood • modified • modify • non-disclosure • nonnegotiable • pressure • pressured • silence • silent • threaten • threatened 	<p>One point for each mention of:</p> <ul style="list-style-type: none"> • accept • accepted • acknowledge • acknowledged • acknowledges • agreed • agrees • alternative • arm's length • attention • aware • choice • cognizant • consent • consented • consents • consult • disclose • disclosed • disclosure • discuss • discussed • discusses • execute • executed • executes • explained • explanation • give and take • mistook • initialed • knowing • knowledge • knowledgeable • negotiable • negotiate • negotiation • opt in • opt out • opted • opt-in • option • opt-out • read • reading • signatory • signature • signed • told • understand • understanding • understood • voluntarily • voluntary • volunteer 	<p>One point for each mention of:</p> <ul style="list-style-type: none"> • arbitral costs • arbitration cost • arbitrator's fee • bias • class action • class wide • class-action • class-wide • conflict of interest • conflict-of-interest • consolidate • consolidation • cost provision • costs provision • cost of arbitration • cost to arbitrate • costs of arbitration • costs to arbitrate • curtail (w/in3) rights • disqualify • expensive • imbalance of rights • internal • limitations of remedies • limits remedies • non mutual • non neutral • non-mutual • non-neutral • one sided • one-sided • one-sidedness • out-of-state forum • partial • relinquishment • restrictions on remedies • unilateral • unilaterally 	<p>One point for each mention of:</p> <ul style="list-style-type: none"> • AAA • adequate discovery • all disputes • American Arbitration Association • approved by SEC • bilateral • bilaterally • due process • due-process • evenhanded • external • impartial • integrity • JAMS • mutual • mutuality • NAF • NASD • National Arbitration Forum • neutral • New York Stock Exchange • NYSE • reciprocal • reciprocity • retired California superior court judge • retired judge • retired superior court judge • safeguards • SEC approved • SEC's approval • SEC's imprimatur • small claims court • unbiased

No points awarded if any of these key terms are accompanied by: lack, lacked, lacks, never, neither, no, not, nor, absence, nothing, fail, fails, failed

ADD one point for each mention of key terms in opposing count that are accompanied by: lack, lacked, lacks, never, neither, no, not, nor, absence, nothing, fail, fails, failed

"Accompanied by" means that the negating term (lack, lacked, etc) preceded the key term and was within 6 words of the key term.

Appendix C

Construction of database (c): Stripping down the judgments to isolate the facts of the case

We do *not* use the entire written judgment when calculating our scores when measuring context. Instead, we isolate the facts of the case that are relevant to the claimed unconscionability of the arbitration clause. If we were to use the entire judgment, our results would be biased. When judges write decisions, they make a number of references to the facts of other cases to either show that this case is similar to a previous case or can be distinguished from a previous case. If we were to use the entire judgment, we would be capturing factual elements of other cases and this would not accurately map the court's portrayal of procedural and substantive concerns in our cases. At the other extreme, simply using the "Facts" section of each case would not provide us with enough information. Judges often lay out only the bare facts in these sections, such as who is suing who, what claims are being made, and what findings the trial court made. Many of our salient facts, such as those related to contractual complexity or how weak the plaintiff is perceived to be, are often discussed only in the "Analysis" or "Discussion" sections of the written judgment.

It is therefore necessary for us to strip down the written judgments so that only the information relevant to our mapping is retained. We do this by removing references to judicial and legislative history and any factual descriptions of previous cases that may appear. We use only majority judgments in our analysis. Dissenting and concurring judgments are not analyzed. Further, we largely eliminate quotations from other cases unless the quotation is followed by a statement indicating similarity with the case at hand.

We take out litigants' contentions that the court expressly disagrees with. For example, the judgment may cite a series of arguments by the defendant that the contract is not a contract of adhesion, but then conclude with "we disagree" or "we find these contentions unpersuasive". Leaving these arguments in would not provide an accurate description of the court's view of the procedural and substantive concerns of the provision. We also remove irrelevant information that may arise in the course of a written opinion. Courts for example may discuss elements of a case that in no way relate to the unconscionability of the arbitration provision. For example, in *Camilo Lopez, Inc. v. Sialic Contractors Corp.*, 2005 Cal. App. Unpub. Lexis 377, the court wrote the following (at pp. 9-10):

"We take this opportunity to indicate our displeasure at the language, tone and presentation of Lopez's briefs. The sarcastic and caustic comments which permeate its briefs are indecorous and unprofessional. The repeated use of bolding, italicizing, underlining and parenthetical commentary rendered the briefs virtually unreadable."

If we were to leave this quotation in, our measure of procedural concerns would be biased.