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Threatening an “Irrational” Breach of Contract

Oren Bar-Gill and Omri Ben-Shahar*

When circumstances surrounding the contract change, a party might consider breach a more attractive option than performance. Threatening breach, this party may induce the other party to modify the original agreement. The contract law doctrine of modification determines whether and when these modifications are enforceable. To promote social welfare as well as the interests of the threatened party, the law should enforce modifications if and only if the modification demand is backed by a credible threat to breach. This paper argues that credibility is not a function of pecuniary interests alone. A decision to breach can be motivated also by sentiments towards the fairness of the division of the surplus between the parties. A party whose share in the surplus is reduced in an unexpected fashion might have a credible threat to breach, even if his absolute payoff from performance is still positive and greater than his payoff from breach. The paper explores the patterns by which such fairness concerns arise. Recognizing the prevalence of these concerns suggests that modifications should be enforced in a larger set of circumstances than previously perceived. Lastly, the paper offers a fresh perspective on some of the landmark cases in the law of modification and duress.

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A person who is known to "dislike" an unfair bargain can credibly threaten to walk away from one, even when it is in her narrow interest to accept it. By virtue of being known to have this preference she becomes a more effective negotiator.—Robert H. Frank.¹

I: INTRODUCTION

When circumstances surrounding the contract change, a party might consider breach a more attractive option than performance. His incentive to breach, often manifested by an explicit modification demand backed by a threat to cease performance, may convince the other party to modify the original agreement. The contract law doctrine of modification determines whether and when these modifications, reached under explicit threats to breach, are enforceable.

It has been recognized, by courts and scholars, that one of the factors that should affect the decision to enforce the modification is the "reasonableness" of the threat to breach. If the new circumstances are such that performance under the original terms would come to involve a loss for one party, his demand for better terms is viewed more favorably, and the resulting modification is more likely to be enforced.² This reasonableness-of-threat test is not, however, the only—or even the main—criterion for enforcing modification agreements. A second test is often applied, focusing instead on the perspective of the *threatened party*, examining whether her acquiescence to the modified terms was extracted in a coercive manner. Under this test, it matters whether the threatened party had reasonable alternatives or adequate resort to remedies. If she had not, the modification agreement is deemed coercive and is governed under the doctrine of "duress," rendering it voidable.³

The two tests—one focusing on the motivation of the threatening party and the other on the alternatives available to the threatened party—may be in conflict. It is not uncommon for a modification demand/threat to be motivated by unanticipated losses, and neverthe-

¹ Robert H. Frank, *Passions Within Reason: The Strategic Role of the Emotions*, 5 (Norton, 1988).

² UCC §2-209, cmt. 2.

³ Restatement (Second) of Contracts § 175 (1981) ("If a party's manifestation of assent is induced by an improper threat by the other party that leaves the victim no reasonable alternative, the contract is voidable by the victim"). *Id.* at cmt. b, Ill. 5 stating: "A, who has contracted to sell goods to B, makes an improper threat to refuse to deliver the goods to B unless B modifies the contract to increase the price. B attempts to buy substitute goods elsewhere but is unable to do so. Being in urgent need of the goods, he makes the modification.[. . .] B has no reasonable alternative, A's threat amounts to duress, and the modification is voidable by B."

less leave the threatened party no choice but to concede. When these conflicts arise, the duress perspective is often the primary one endorsed by courts, rendering the modification unenforceable.⁴ We have argued elsewhere against this hierarchy among the normative criteria. We demonstrated that enforcement of modifications should turn on one, and only one, factor: whether the threat to breach, which led to the modification, was credible.⁵ In this paper, we turn to examine more systematically the factors that can render the threat to breach credible. In doing so, we hope to complement our previous work with a more robust descriptive account of the bargaining environment.

Accordingly, the analysis in this paper addresses the contract modification problem from the perspective of the threatening party. It examines the credibility of his modification threat, namely, his motivation to breach the original contract in case his modification demand is turned down.

Economic analysis provides a standard tool to evaluate the issue of threat credibility. It assesses the payoff to the threatening party from carrying out the threat, which usually equals his breach liability, and compares it to his payoff from retracting the threat and performing the agreement under the original terms. It is only when the pecuniary loss from performance exceeds the pecuniary cost of breach that the threat is deemed credible. Otherwise, the threat to breach is "cheap talk," as game theorists would put it, or a "bluff," and may well be disregarded.

This paper develops an additional perspective to supplement the standard economic account of the credibility of threats to breach. This perspective suggests that the breach-or-perform decision can be motivated by factors that are not captured by standard pecuniary calculus. In particular, the decision can be motivated by sentiments towards the *fairness of the division* of the surplus between the parties. A party whose share in the surplus is reduced in a manner that violates his notions of fairness may have a credible threat to breach, even if his absolute payoff from performance is still positive and greater than his payoff from breach.

Building on previous literature that identified the general prevalence of "fairness" sentiments in economic decisions, the paper ex-

⁴ Arthur Linton Corbin, 7 *Corbin on Contracts* §28.6 (West, 1964); E. Allan Farnsworth, 1 *Contracts* 282 (Little Brown, 3rd ed 1999) ("In fashioning a solution to the problem of the enforceability of modifications, the drafters of the Code discarded the trappings of the doctrine of consideration to bare the real abuse of the bargaining process—coercion. The result is remarkably consistent with the liberalized rules on duress.")

⁵ Oren Bar-Gill and Omri Ben-Shahar, *The Credibility of Threats to Breach*, Discussion Paper No. 2002-017, John M. Olin Center for Law and Economics, University of Michigan Law School (2002).

plores the patterns by which such fairness concerns affect the credibility of threats to breach existing contracts. It demonstrates that the threat to breach can be credible while "irrational": the threatening party may carry it out even if doing so, and bearing liability for breach, is more costly than performance under the original terms.⁶ The paper then studies the normative implications of this descriptive insight. It shows that, in order to protect the interests of the *threatened party*, modifications ought to be enforceable in a larger set of circumstances than previously perceived.

To illustrate, consider a seller who experiences an unexpected increase in his cost of performance (due to forces outside the seller's control). Assume that the increased cost is such that the seller would suffer a small net loss if he performs the contract, but would suffer a greater loss if he breaches and is ordered to pay damages. The seller demands a modification—one that would allow the seller to cover his cost, but would still leave the buyer with a positive profit. Imagine that the buyer refuses to modify the contract, requiring the seller to bear the entire burden of the unanticipated cost increase. Traditional notions of credibility suggest that if the buyer refuses to modify the contract the seller would simply perform it. The seller is better off bearing the cost increase than liability for breach. However, the seller may also deem performance under the original terms to be unfair. It provides him with a smaller share of the ex post surplus than he "deserves," violating his desire to be treated fairly by his opponent, stirring sentiments of anger, insult, and the like. Such sentiments provide an additional reason for the seller to prefer breach to performance under the original terms. If these fairness concerns are sufficiently strong, they can render the seller's seemingly noncredible threat to breach sufficiently credible to be taken seriously. It might be in the interest of the buyer to acquiesce to such a threat and concede better terms to the seller, thereby avoiding the risk of stirring a hostile action on the part of the seller. The only way the buyer can make such a commitment and avoid breach is by making an enforceable modification.

The analysis in this paper is organized as follows. Section II begins with a brief introduction to the law of contract modification. Section III describes the "credibility principle," namely, the idea that enforcement of modifications should turn *solely* on the issue of the

⁶ Throughout the discussion we do not take a position on the question whether emotional responses, such as anger and insult, are necessarily in conflict with the predictions of rational choice theory. For recent contributions to this debate, see e.g. Ken Binmore, *Game Theory and the Social Contract, Volume II: Just Playing* 338-343 (MIT 1998); Matt Ridley, *The Origins of Virtue* 133 (Viking Penguin, 1997).

credibility of the threat to breach. Section IV is the core of the paper. It develops a model of decision making motivated (in part) by fairness concerns. It distinguishes several sources of fairness sentiments, and identifies their effect on the credibility of the threat to breach. Section V then derives the normative implications for modification doctrine and applies these lessons to some leading cases. Section VI concludes.

II. THE LAW OF CONTRACT MODIFICATION

The law of contract modification has long outgrown its early premise that modifications are promises lacking consideration and thus unenforceable.⁷ In the old days, this premise forced courts to recite two false observations. First, it was commonly stated that the acquiescing party—usually a creditor who is asked to waive some of the debt—is receiving nothing in return for his acquiescence. “Payment of a lesser sum on the day cannot be a satisfaction of a greater sum” was the instructive statement by Lord Coke in *Pinnel’s Case*.⁸ Even in following this directive, courts acknowledged its fallacy: “it may be much more advantageous to the creditor to obtain immediate payment of part of his debt than to wait to enforce payment.”⁹ Accordingly, courts have invented an “offsetting” fiction, also evidently false, that modification involves consideration in the form of rescission of the original contract.¹⁰

The notion that a modification’s fate ought to be determined by the doctrine of consideration has been reformed, both judicially and legislatively.¹¹ Instead, courts are instructed to verify that the modification demand was made in good faith, and that it was “fair and equitable” in view of the changed circumstances. These instructions direct courts to examine the perspectives of both parties. They have to look at the reasons why a party made the modification demand in the first place, namely, were there “reasonable commercial reasons” such as “a market shift which makes performance come to involve a loss.”¹² But courts also look at the position of the other party, whether her surrender to the modification demand exhibits coercion and duress.¹³

⁷ Samuel Williston, 3 A Treatise on the Law of Contracts § 7:36 (Lawyers Cooperative Publishing, 4th ed 1992).

⁸ 77 Eng Rep 237 (CP 1602).

⁹ *Foakes v. Beer*, 9 App Cas 605 (1884).

¹⁰ See, e.g., *Schwartzreich v. Bauman-Basch, Inc.*, 131 NE 887 (NY 1921).

¹¹ Restatement § 89 (cited in note 3); UCC §2-209 (1) (“An Agreement modifying a contract within this Article needs no consideration to be binding”).

¹² UCC §2-209, Cmt. 2.

¹³ See, e.g., *Austin Instrument, Inc. v. Loral Corp.*, 272 NE2d 533 (NY 1971).

Much of the modification jurisprudence has focused on the issue of duress. Both the Restatement and the Code agree that if duress was present, the modified agreement is voidable.¹⁴ And both Code and common law court decisions tend to find duress whenever the threatened party has no effective resort to remedies or to substitute deals and must surrender to the threat.¹⁵ While there is occasional adherence to the idea that the enforceability of modification should turn on the issue of the credibility of the threat to breach,¹⁶ court decisions have by and large conformed to the duress principle.¹⁷

Lastly, in those cases that do apply the credibility principle, namely, enforce a modification only if the modification demand was reasonable or credible, the main factor that courts investigate is whether the original contract came to involve a loss. In such circumstances, where the party suffering a pecuniary loss is likely to breach rather than perform under the original terms, some courts have reasoned that in the absence of a modification breach would likely occur, to the detriment of both parties.¹⁸ Still, even in these cases, in evaluating the credibility of the modification demand courts have looked strictly at the pecuniary comparison between the cost of performance under the original terms and the cost of breach.

It is fair to say, then, that the law of contract modification has generally been subsumed by the doctrine of duress. What determines if a modification is enforceable is the threatened party's free assent.¹⁹ In the next section, we examine the desirability of this approach. We develop the "credibility principle," which suggests that the threatened party's free assent should *not* be the determining issue. Instead, the sole enforceability criterion should be the credibility of the threat to breach.

¹⁴ See, e.g., Marvin Chirelstein, *Concepts and Case Analysis in the Law of Contracts* 69 (Foundation, 4th ed 2001).

¹⁵ *Austin*, 272 NE2d at 535 (duress exists only when "the threatened party could not obtain the goods from another source of supply and the ordinary remedy of an action for breach of contract would not be adequate").

¹⁶ *Gobel v. Linn*, 11 N.W. 284 (Mich 1882); *Angel v. Murray*, 322 A2d 630 (RI 1974).

¹⁷ Corbin, *Corbin on Contracts* at 57 (cited in note 4). "A modification coerced by a wrongful threat to breach under circumstances in which the coerced party has no reasonable alternative should prima facie be voidable. . . . In such circumstances, it should be immaterial that the party exercising coercion has a good business reason for its wrongful demands." *Id.* [emphasis added].

¹⁸ See, e.g., *Jaffray v. Greenbaum*, 20 NW 775, 778 (Ia 1884). High rent originally agreed upon may be less valuable to the landlord than the modified lower rent, which guarantees that the tenant should remain in business and in occupancy. *Id.*

¹⁹ Robert A. Hillman, *Policing Contract Modifications under the UCC: Good Faith and the Doctrine of Economic Duress*, 64 Iowa L Rev 849, 880-84 ("the issue of free assent is at the core").

III. THE CREDIBILITY PRINCIPLE

A. Informal Analysis

When a party makes a demand for modification of a contract, backed by a threat to breach if the demand is rejected, will the threatened party acquiesce and accept less favorable terms? In analyzing this question, we have to consider what will be the result of a rejection of the modification demand.

For the threatened party to accommodate the modification demand and surrender to less favorable terms, she must first perceive the threat to breach to be credible (or that there is a positive probability that it is credible). If she deemed the threat to be a bluff, there would be no cost for her in rejecting the threat: the threatening party will not carry his threat out, but rather perform the contract under the original agreed-upon terms. Thus, a necessary condition for modification to occur is the credibility of the threat to breach.

Credibility is a necessary, but not sufficient, condition for modification. Even if the threat is credible, the threatened party may prefer to reject it. Since she already acquired a contractual right for performance under the original terms, she expects that a rejection of the threat would result in breach, which in turn would entitle her to expectation damages. Thus, the threatened party compares the value of the remedy to the value that she will be left with under a modified contract. Note that when the threat to breach is credible, her choices no longer include a third alternative, namely, the value of performance under the original terms; the other party, having a credible threat to breach, will not perform the contract under the original terms. Accordingly, the threatened party's remaining choice is between performance under the modified, less favorable, terms, and breach remedies.²⁰

For modification to occur, then, it is necessary that the threat to breach would be credible, and that the threatened party would prefer the modified terms to remedies for breach. Further, modification will only be agreed upon if the parties can, at the renegotiation stage, find terms that would make them *both* better off relative to non-agreement and breach. One obvious case in which no such "bargain-

²⁰ Many courts have taken the position that the threatened party should be entitled to the value of the performed contract under the *original*, pre-modification, terms, and have pursued this policy by refusing to enforce the conceded modification. However, under this prevalent non-enforcement approach, the threatening party will realize that any renegotiated concession he extracted is valueless, and will not bother offering the modification. If he has a credible threat to breach, he will prefer to breach. In other words, courts' perception that the pre-modification terms can be enforced is misguided.

ing range" exists, is where performance came to involve costs exceeding its value (the case of "efficient breach"). But a bargaining range may not exist at the renegotiation stage even if performance is still efficient. If the burden of remedies on the breaching party is less than the value of remedies to the breached-against party, such "bargaining range" may not exist, and an inefficient breach—rather than modification—would occur.

This analysis suggests that in order to understand (and predict) when a modification would occur, we need to examine the motivations of both the threatening party and the threatened party. Accordingly, it might be conjectured, in determining when a modification should be *enforced*, courts would need to examine both parties' positions. In particular, courts would need to check whether the threatening party had a credible threat to breach *and* whether the threatened party had reasonable alternatives or adequate resort to remedies. Indeed, this is what courts often do.²¹

As we showed elsewhere,²² however, this conclusion is misguided. In deciding whether to enforce a modification that was obtained by threat to breach, the court should focus *solely* on the threatening party's perspective, and enforce the modification any time the threat that led to it was credible. In particular, the court should *not* focus on the motivation of the threatened party. Whether this party had adequate resort to remedies or not should have no bearing on the normative decision whether to enforce a modification.

The reason why enforcement should *not* turn on the issue of the adequacy of remedies is the following. When the threatened party's effective choice is between the modified terms and remedies for breach, her acquiescence to the modification demand indicates that she herself deemed remedies for breach to be inferior to the modified terms. Otherwise, if remedies were deemed adequate, why would she concede to the threat and accept less favorable terms? Thus, from the perspective of the threatened party, her acquiescence indicates she would unambiguously be better off if the modification were enforced than having to settle for remedies. Put differently, if a court faces a case in which a modification occurred, it must infer that the threatened party deemed her remedies to be inadequate. Thus, there is no reason to condition enforcement on the question of the adequacy of remedies. This inadequacy-of-remedies test is equivalent to a regime of non-enforcement of modifications.

Moreover, the tendency of courts to examine the threatened party's

²¹ Farnsworth, *Farnsworth on Contracts* at §4.22 [cited in note 4].

²² See Bar-Gill and Ben-Shahar, *The Credibility of Threats to Breach* [cited in note 5].

situation, and to invalidate the modification whenever it was extracted by duress, namely, whenever the threatened party had no reasonable alternatives or adequate remedies, is harmful to the *threatened party* herself (even though she is the one who, ex post, is seeking this invalidation). It means that she cannot make a credible commitment ex ante to modify the original contract. In such situations, the other party will not bother to extract a modification (anticipating that they will be struck down anyway). That is, precisely in those cases in which the threatened party would want to make a commitment and avoid the outcome of breach, courts' reluctance to enforce the modification makes this goal impossible to achieve.

This analysis suggests that the only factor that should bear on the decision to enforce a modified contract is the credibility of the threat that led to the modification. In particular, to the extent that the threatened party may have difficulty distinguishing between credible threats and bluffs, and may thus be unable to acquiesce "selectively," only to credible threats, courts can promote the optimal outcome by inquiring into the credibility of the threat and enforcing modifications only when the threats that led to them were credible.

Once it is established that the sole relevant criterion for enforceability of deals reached under a threat is the credibility of the threat, it is worth exploring the various factors that bear on the issue of credibility. For example, it would be important to understand which categories of unanticipated cost increases are more likely to enhance the credibility of the threat to breach. In addition, it would be important to examine the modification jurisprudence and check the extent to which court decisions conform to the credibility condition. We began this exploration elsewhere.²³ However, in that work we restricted our attention to factors that would affect the credibility of a *rational* threatening party. We did not explore factors that might make an *irrational* threat credible nevertheless. It is this direction that we pursue in the current paper. We argue that a threat to breach can be credible even if it is against the pecuniary interest of the threatening party to carry it out. However, before turning to the analysis of such "irrational credibility" let us briefly restate the above discussion in more formal terms, and thus develop a framework for the subsequent irrationality analysis.

²³ See Bar-Gill and Ben-Shahar, *The Credibility of Threats to Breach* at sections IV-V (cited in note 5). There, we argue that much of the modification jurisprudence does *not* conform to the credibility principle. We identified prominent examples where modifications were voided even though the threats under which they were made were credible. See, e.g., *Kelsey-Hayes Co v. Galtaco Redlaw Casting Corp*, 749 F Supp 794 (E D Mich 1990).

B. Formal Analysis

Consider a seller (he) and a buyer (she) contracting over the sale of one indivisible asset. The following timing summarizes the interaction. At period 0 the two parties sign the original contract, specifying the delivery of the asset by the seller to the buyer in exchange for a payment, p .²⁴ The value of the asset to the buyer is v . The seller's cost of creating the asset (or parting with the asset, namely the value of the asset to the seller) is thought to be c , at this period.

Before period 1, an "unanticipated" change of circumstances might increase the cost of performance for the seller from c to $C > c$. It is assumed that performance is efficient, even with the higher price C , namely $v > C$. While the seller observes the actual cost realization, c or C , the buyer can only observe the distribution from which this cost is drawn. For simplicity, assume that there is a probability π that the seller's cost will be $C > c$, and a probability $(1 - \pi)$ that the seller's cost will remain c .

As a result of the cost increase, at period 1 the seller may demand to renegotiate the contract price. It is assumed that if renegotiation is successful, the parties agree on a new price, $P > p$. The conditions under which such a modification will occur and the precise value of P are analyzed below. Then, at period 2, the seller decides whether to deliver the asset to the buyer, i.e. whether to perform or breach the original or modified contract (depending on the success or failure of the period 1 renegotiation).

Finally, at period 3, litigation may occur. If a modification was agreed upon at period 1, the buyer may seek to invalidate it and the seller may seek to enforce it. The court's decision will depend on the legal rule of enforceability, and the analysis will consider possible legal regimes. If, instead, a modification was not negotiated and the seller breached, the buyer will seek damages for breach, d , and it is assumed that she can secure a judgment for monetary damages equal to her expectation loss, namely, $d = v - p$.

One begins by looking at the seller's incentive. If the seller's attempt at modification fails, will he perform or breach the initial contract? The seller's decision is based on a comparison between his performance payoff and his breach payoff. If the seller performs, he nets $p - \hat{c}$, where $\hat{c} \in \{c, C\}$. If he breaches, a court will ideally order him

²⁴ This is clearly an incomplete contract. For similar accounts of contractual incompleteness and subsequent renegotiation see, e.g., Milton Harris and Bengt Holmstrom, *On the Duration of Agreements*, 28 *Intl Econ Rev* 389, 389-405 (1987); Ronald A. Dye, *Optimal Length of Labor Contracts*, 26 *Intl Econ Rev* 251, 251-270 (1985); and Steven Shavell, *The Design of Contracts and Remedies for Breach*, 99 *Quar J Econ* 121, 121-148 (1984).

to pay damages of $d = v - p$ at period 3. Generally, however, the burden imposed on the seller by these prospective damages is different than d , and may be either higher or lower. Denote this burden by D_s . Comparing the seller's performance payoff and breach payoff, following a rejection by the buyer of the modification demand, the seller will decide to breach *if and only if*

$$(1) \hat{c} - p > D_s$$

If condition (1) holds, the seller will decide to breach at period 3. Otherwise, he will perform. When condition (1) is satisfied, the seller has a *credible threat to breach*.²⁵ Accordingly, we refer to condition (1) as the "credibility condition." We assume that when $\hat{c} = c$ the credibility condition is not satisfied, but when the cost of performance turns out to be unexpectedly high, i.e. when $\hat{c} = C$, the credibility condition may be satisfied and the seller may have a credible modification demand.

Turn now to period 1, when the parties may renegotiate the original contract. These renegotiations are influenced by the informational asymmetry between the two parties. In particular, the buyer does not observe the seller's actual performance cost, and therefore does not know whether the seller has a credible modification demand.²⁶ However, the buyer knows how much she can recover if a breach occurs. While the court will ideally award the buyer damages of $d = v - p$, the actual value of the remedial right will generally be different from d . Denote this value by D_B . The buyer will refuse to negotiate any modification and will resort to damages whenever $D_B \geq v - p (= d)$. If, however, $D_B < v - p$, namely, if the buyer is inadequately protected by remedies, she may agree to a new, higher price, P . What this price will be depends on her bargaining power, the informational structure of the bargaining, and the legal regime concerning enforceability of modifications.

In particular, it can be shown that if courts apply a selective enforcement regime, under which a modification is enforceable only when the threat that led to it was credible, the buyer will concede a price increase of $\Delta p \in [C - p - D_s, v - p - D_B]$,²⁷ and a modification will be demanded (and agreed upon) only when the seller has a credible threat.²⁸ It can also be shown that such a regime is superior, from the buyer's perspective as well as from a social perspective to either, an unconditional enforcement regime, a no-enforcement regime, or

²⁵ Note that condition (1) implies $D_s < d$.

²⁶ Assume for now that C is sufficiently large so that $C - p > D_s$.

²⁷ Depending on the parties' relative bargaining power. Note that there will be no modification unless $C - p - D_s \leq v - p - D_B$ or $v - C \geq D_B - D_s$.

²⁸ See Bar-Gill and Ben-Shahar, *The Credibility of Threats to Breach* at Section III (cited in note 5).

a "duress" regime that conditions enforcement on the availability of adequate remedies or substitutes.²⁹

IV. FAIRNESS

We have seen that a modification ought to be enforced any time it results from a credible threat to breach. The credibility of a seller's threat to breach is determined by condition (1):

$$(1) \hat{c} - p > D_s$$

We focus initially on the cost element in condition (1). Recall that absent an unanticipated change of circumstances the cost of performance is c and condition (1) does not hold. Now, consider an unanticipated event that raises the cost of performance to C , such that the seller now faces a losing contract, i.e. $C > p$. Assume, however, that this loss is still smaller than the cost of breach, i.e. $C - p < D_s$. From a perfect rationality perspective, the seller does not have a credible threat to breach.

By assumption, the cost of breach is greater than the material cost of performance. But, the material cost may not be the only relevant cost associated with performance. In particular, the seller might incur a "fairness cost" when performing the contract. After all, why should the seller bear the entire burden imposed by an unanticipated cost increase, the occurrence of which was beyond his control? Why should he lose from the transaction, while the buyer profits? Moreover, the transaction can be readily modified, by adjusting the contract price, such that the seller's loss will be prevented, and still the buyer will make a positive profit. Why not insist on such a modification? Any other outcome would simply be unfair. Accordingly, we turn to examine the patterns by which such notions of unfairness would affect the seller's willingness to breach.

A. Preferences for Fairness

Recent experimental studies have reported that in important economic settings individuals' behavior cannot be described solely on the basis of the maximization of absolute monetary payoffs. In particular, fairness concerns have been shown to play a role in describing individuals' assessment of their well-being. Observed patterns of decision-making appear, in these instances, to be at odds with the assumption of maximization of absolute monetary payoff.

²⁹ Id.

In the labor market context, workers, when treated unfairly, often react and respond by reducing the effort they invest.³⁰ Fairness considerations have also been invoked to “explain why many employers do not cut wages during periods of high unemployment despite the potential offered by the supply/demand levels.”³¹ The significant impact of fairness concerns on behavior has been demonstrated in other economic contexts as well. Arthur Okun observed that—

firms in the sports and entertainment industries offer their customers tickets at standard prices for events that clearly generate excess demand. Popular new models of automobiles may have waiting lists that extend for months. Similarly, manufacturers in a number of industries operate with backlogs in booms and allocate shipments when they obviously could raise prices and reduce the queue.³²

The failure of these markets to clear has been attributed to “the hostile reaction of customers to price increases that are not justified by increased costs and are therefore viewed as unfair.”³³

Most relevant to the contract modification problem, fairness clearly affects behavior in bargaining contexts.³⁴ The most striking example concerns the simplest form of bargaining, the take-it-or-leave-it offer, also known as the ultimatum game. To give a concrete example, assume that A and B must decide how to allocate \$100 between them. A proposes a certain allocation. B can either accept or reject A’s pro-

³⁰ See George A. Akerlof and Janet L. Yellen, *The Fair Wage-Effort Hypothesis and Unemployment*, 105 *Quar J Econ* 255, 255-83 (1990).

³¹ See George A. Akerlof, *The Case Against Conservative Macroeconomics: An Inaugural Lecture*, 46 *Economica* 219, 219-37 (1979); Robert M. Solow, *On Theories of Unemployment*, 70 *Amer Econ Rev* 1, 1-11 (1980); Daniel Kahneman, Jack L. Knetsch and Richard H. Thaler, *Fairness and the Assumptions of Economics*, 59 *J Bus* 285, 285-300 (1986); Daniel Kahneman, Jack L. Knetsch and Richard H. Thaler, *Fairness as a Constraint on Profit Seeking: Entitlements in the Market*, 76 *Amer Econ Rev* 728, 728-41 (1986); Margaret A. Neale and Max H. Bazerman, *Cognition and Rationality in Negotiation* 158 (Free Press, 1991); Frank, *Passions Within Reason* at 177-78 (cited in note 1).

³² Arthur Okun, *Prices and Quantities: A Macroeconomic Analysis* 170 (Brookings Institute, 1981).

³³ Kahneman et al, 59 *J Bus* 285 (cited in note 31); Kahneman et al, 76 *Amer Econ Rev* 728 (cited in note 31) (discussing Okun and providing additional examples). See also Frank, *Passions Within Reason* at 174-177 (cited in note 1).

³⁴ See generally Matthew Rabin, *Incorporating Fairness Into Game Theory and Economics*, 83 *Amer Econ Rev* 1281, 1281-1302 (1993); Max H. Bazerman and Margaret A. Neale, *The Role of Fairness Considerations and Relationships in a Judgmental Perspective of Negotiation* in Kenneth J. Arrow et al, eds, *Barriers to Conflict Resolution* ch 5 (Norton & Co, 1995); Steffen Huck and Jörg Oechssler, *The Indirect Evolutionary Approach to Explaining Fair Allocations*, 28 *Games & Econ Behav* 13, 13-24 (1999).

posal. If B accepts, the \$100 are divided according to A's proposal. If B rejects both parties get nothing. The perfect rationality game theoretic equilibrium in this game is straightforward. A offers an allocation, in which B gets a penny, and B accepts A's proposal, since a penny is better than nothing. Any implicit or explicit threat by B to reject offers that give her less than some larger share is not credible, will not affect A's offer, and will not be carried out by B. This prediction, based on the assumption of individual maximization of absolute monetary payoffs, might be straightforward, but it is also patently unrealistic. Robust empirical results demonstrate that responding parties in one-shot ultimatum games consistently reject "unfair" offers even at the expense of reducing their own payoffs significantly. And, consequently, proposing parties offer "fair" allocations with substantial sums awarded to the respondent.³⁵

One intuition explaining this result is that people would like to be treated fairly and that this fairness concern may affect their behavior. As Richard Thayer puts it, when a party declines a positive offer, "he signals that his utility function has non-monetary arguments. (In English, this means he is insulted.) [He] says: 'I would rather sacrifice 1¢ than accept what I consider to be an unfair allocation of the stake.'"³⁶ Another way to view this phenomenon is as one manifestation of an internalized social norm, usually applied in repeated interactions, which prescribes retaliatory actions towards selfish behavior.³⁷

Irrespective of their underpinning, fairness concerns clearly play a role in describing individual behavior. To better understand this role, we attempt to impose some structure onto these preferences for fairness. In doing so we begin with the concept of a "fair outcome" in the modification problem. We then develop a notion of an "unfairness cost" that a seller bears when performing an unfair contract.

³⁵ See, e.g., Werner Guth, Rolf Schmittberger and Bernd Schwartz, *An Experimental Analysis of Ultimatum Bargaining*, 3 J Econ Behav & Org 367 (1982); Kahneman et al, 59 J Bus 285 (cited in note 31); Colin Camerer and Richard H. Thaler, *Ultimatums, Dictators, and Manners*, 9 J Econ Persp 209 (1995). See also Christine Jolls, Cass R. Sunstein and Richard H. Thaler, *A Behavioral Approach to Law and Economics*, 50 Stan L Rev 1471, 1489 (1998); Russell B. Korobkin and Thomas S. Ulen, *Law and Behavioral Science: Removing the Rationality Assumption from Law and Economics*, 88 Calif L Rev 1051, 1051-1144 (2000). It should be noted that the experiments mentioned in the text were carefully designed to preclude any reputation effects by staging the game as a one-shot interaction between strangers.

³⁶ Richard Thaler, *The Winner's Curse: Paradoxes and Anomalies of Economic Life* 23 (Princeton, 1992).

³⁷ Binmore, *Game Theory and the Social Contract* at 343 (cited in note 6), and more generally Allan Gibbard, *Wise Choices, Apt Feelings* 64-82 (1990).

B. What Is Fair? Identifying the Fair Outcome in the Modification Context

The first step in incorporating fairness concerns into an individual's preferences is the introduction of a concept of a "fair outcome." A "fair outcome" or a concept of "fairness" is not an objective term. The perception of "fairness" depends on the social environment (for example on "what other people get") or on the history of the interaction. Players do not necessarily agree on the concept of fairness as it may depend on the role they play in the game. Consequently, fairness is in the eye of the beholder.³⁸

Fairness concerns at the modification stage are triggered by the unanticipated increase in the seller's cost of performance. But, the cost of performance is not a uniform concept. Various changes can affect different elements comprising the seller's cost of performance. And, changes in different types of costs may have a different impact on the relevant fairness concept. The question is therefore what types of cost increase trigger a fairness claim supporting the seller's attempt to pass-on (at least) part of the cost increase to the buyer?

The central distinction is between actual costs and alternative costs. An increase in the seller's actual costs is exemplified by an unexpected rise in factor prices. This type of cost increase will often invoke fairness concerns that may assist the seller in extracting a modification. But, economic costs are not limited to such actual costs.

Economists have long recognized the importance of alternative costs. The alternative cost of a given action equals the forgone opportunities that this action entails. Therefore, the alternative cost of performance equals the value of the best alternative use the seller has for the same resources he must devote to performance. In particular, if a new buyer offers the seller a much higher price for the said performance, this would increase the seller's alternative cost. Empirical evidence suggests that compared to an increase in actual costs, an increase in the seller's alternative costs will have a much smaller effect on the seller's ability to extract a modification. Arthur Okun documents the hostile reaction of customers to price increases triggered

³⁸ See, e.g., Neale and Bazerman, *Cognition and Rationality in Negotiation* at 158 (cited in note 31) ("[F]airness is not an objective state. Rather, a social environment is cognitively transformed, and a state of (un)fairness is perceived"); Linda Babcock et al., *Biased Judgments of Fairness in Bargaining*, 85 *Amer Econ Rev* 1337 (1995); Linda Babcock and George Loewenstein, *Explaining Bargaining Impasse: The Role of Self-Serving Biases*, 11 *J Econ Persp* 109 (1997); Howard Raiffa, *The Art and Science of Negotiation*, 345 (Harvard, 1985) ("you want your just share, and what you think is a "just share" may not agree with your adversaries' assessments").

by excess demand, as opposed to price increases induced by increased actual costs.³⁹ Kahneman et al. presented subjects with a hypothetical concerning a hardware store that raises the price of snow shovels after a large snowstorm. Eighty two percent of the subjects considered such a price increase, driven by excess demand, namely, by the increase in alternative costs, to be unfair. A similar price increase driven by a rise in the wholesale price of shovels would not have garnered such hostile reactions.⁴⁰

To ascertain the effect of fairness on credibility, we focus on the seller's perspective. We identify three considerations that may affect the seller's perception of a fair outcome at the modification stage: (1) equal division of the actual *ex post* surplus; (2) sharing the burden of an unexpected cost increase, and (3) guaranteeing the *ex ante* division of surplus.⁴¹

1. The Equal Split

The first consideration that may affect the seller's concept of fairness relies on a notion of ex-post equality. According to this notion, fairness requires an equal division of the actual surplus between the two parties. If the cost of performance turns out to be C , the contract price should be increased to $1/2(v + C)$ in order to achieve a fair allocation. The fair outcome, from the seller's perspective, is defined by the fair price $1/2(v + C)$.

Numerous studies have demonstrated that the equal split is considered by many to be the fair outcome.⁴² The equal split notion of fairness is by no means unique to the modification context. It is prevalent in general bargaining problems. As Gibbard puts it, individuals "latch onto symmetries, favoring equal division or

³⁹ See Okun, *Prices and Quantities* at 170 (cited in note 32).

⁴⁰ See Kahneman et al, 76 *Amer Econ Rev* at 729, 732-734 (cited in note 31).

⁴¹ A fourth consideration may place greater weight on the original contract, arguing that the parties' initial agreement must be honored regardless of any changed circumstances. However, this concept of fairness will most likely be adopted by the buyer, and not by the seller. See the sources cited in note 38 of this article for a discussion of the subjectivity and self-serving nature of fairness concerns. Moreover, such a concept of fairness, if adopted by the seller, will not bolster the credibility of the threat to breach.

⁴² See, e.g., Jack Ochs, and Alvin E. Roth, *An Experimental Study of Sequential Bargaining*, 79 *Amer Econ Rev* 335 (1989); Guth, 3 *J Econ Behav & Org* 367 (cited in note 35); Kahneman et al, 59 *J Bus* 285 (cited in note 31). Robert Frank has proposed the following definition of a fair transaction: "A fair transaction is one in which the surplus is divided (approximately) equally. The transaction becomes increasingly unfair as the division increasingly deviates from equality." Frank, *Passions Within Reason* at 165 (cited in note 1). It has also been argued that the fifty-fifty split is the evolutionary stable convention in bargaining. See H. P. Young, *An Evolutionary Model of Bargaining*, 59 *J Econ Theory* 145, 145-168.

proportionality," and this judgment is "deeply ingrained by early acculturation."⁴³

In particular, this notion of fairness would arguably affect also the first stage bargaining between the seller and the buyer. At this first stage, when both parties believe that the seller's cost of performance is c , the equal split norm advocates a contract price of $1/2(v + c)$. Obviously, this does not mean that the original contract price will always be $1/2(v + c)$. Disparate bargaining power and other factors also play an important role in determining the stage 1 price. It does mean, however, that other thing equal, a deviation from this benchmark of equality reduces the willingness of a party to enter into the deal. Likewise, at the renegotiation stage, a deviation from the adjusted benchmark of equality will affect the willingness of a party to remain in the deal.

It should be noted that the existence of an original agreement between the parties, which often deviates from the equal split notion, suggests that pecuniary interests might override parties' fairness concerns. It may well be, however, that the intensity of the fairness sentiments under the original contract—the deviation of the original price from the benchmark of $1/2(v + c)$ —is sufficiently increased under the new circumstances, once the original price is compared to the revised equal-split benchmark of $1/2(v + C)$, to override the rational pecuniary calculus. The framework for formalizing the intensity of fairness concerns will be developed in Section C below.

2. Sharing Unexpected Burdens

The second consideration that may affect the seller's concept of fairness also relies on a notion of equality or sharing, but to a lesser degree. According to this sharing notion, fairness does not require an equal split of the overall surplus, but only of the unanticipated increase in the seller's cost of performance. By assumption the seller was not responsible for this change of circumstances, and thus should not bear the burden alone. In contrast to the equal split consideration, the sharing principle applies only where the original contract is silent, namely it applies only to the unanticipated cost increase, and not to the overall surplus.

Charles Fried in his seminal book, *Contract as Promise*, advocates this sharing approach with respect to what he calls "contractual accidents."⁴⁴ A "contractual accident" occurs when an unan-

⁴³ Gibbard, *Wise Choices, Apt Feelings* (cited in note 37).

⁴⁴ Charles Fried, *Contract as Promise* 69-73 (Harvard, 1981). Fried focuses on excuse cases (mistake, frustration of purpose, impossibility and impracticability), but the logic of his argument applies to the modification context as well.

anticipated contingency arises on which agreement is absent. In such cases—

there may be no basis for holding the parties responsible or accountable to one another. Rather, persons in some relation, perhaps engaged in some common enterprise, suffer an unexpected loss. . . . The sharing principle comes into play where no agreement obtains, [and] no one in the relationship is at fault. . . . Sharing applies where there are no rights to respect. . . . It is peculiarly appropriate to filling the gaps in agreements, to picking up after contractual accidents.⁴⁵

While Fried advocates a normative principle, it is based on intuitive notions of justice that may often motivate individuals, and to that extent it would have a positive, or descriptive, validity. Accordingly, if an anticipated increase in the seller's cost from c to C is viewed as a contractual accident, the sharing principle will be triggered. According to the sharing principle, the loss of $(C - c)$ should be split between the parties such that each party should bear $1/2(C - c)$. Therefore, the contract price should be increased by $1/2(C - c)$.

3. Guaranteeing the Ex Ante Division of Surplus

The third consideration that may affect the seller's perception of a fair outcome places greater weight on the *ex ante* division of surplus as determined by the original contract price. Specifically, if the stage 1 price is p , then the original contract allotted a fraction $(p - c)/(v - c)$ of the surplus to the seller and a fraction $(v - p)/(v - c)$ of the surplus to the buyer. Fairness requires respect for this *ex ante* division. This division was the true product of the parties' mutual assent. That is, under this view what the parties fundamentally agree upon when they enter a contract is a certain division of the surplus: what is the relative fraction that each gets. They dress this agreement in a set of ad-hoc terms, but only because these terms achieve the intended split. Accordingly, when circumstances change, the basic agreement concerning the division of surplus should be maintained, and the terms of the agreement should be adjusted.

When the seller experiences an unexpected cost increase, this alters (specifically, reduces) the *magnitude* of the surplus. According to the seller's fairness perception, these changed circumstances should not affect the agreed upon *division* of the (new) surplus. Therefore, if the seller is to receive a fraction $(p - c)/(v - c)$ of the actual surplus, the

⁴⁵ Id. at 70-71.

modified contract price should satisfy: $(P - C)/(v - C) = (p - c)/(v - c)$, or $P = C + (v - C) \cdot (p - c)/(v - c)$, implying $P > p$.

The notion that the fair price at the modification stage depends on the original transaction relates to the empirical findings regarding the strong influence of the "reference transaction" on people's conception of fairness.⁴⁶ Moreover, these findings suggest that exogenous shocks, leading to an increase in the cost of performance, justify an increased price that maintains the "reference profit."⁴⁷

4. The Three Concepts of Fairness Compared

We have presented three distinct concepts of fairness that may influence the seller's behavior in the modification stage. Before proceeding further, it is useful to compare these three concepts and identify the relationships between them.

Consider the following example. Assume that $c = 0$, $v = 100$ and $C = 60$. According to the equal split (ES) concept the fair price should now be $P^{ES} = 1/2(100 + 60) = 80$. According to the sharing of burdens (SB) concept, the fair price should be $P^{SB} = p + 1/2(60 - 0) = p + 30$. And, according to the *ex ante* division of surplus (ED) concept, the fair price should be $P^{ED} = 60 + (100 - 60) \cdot (p - 0)/(100 - 0) = 60 + 0.4 \cdot p$.

Using the preceding example, we can now state the relationship between the three fairness concepts.

Claim:

- (i) When the original contract price, p , implements an equal split of the *ex ante* surplus, $v - c$, all three fairness concepts imply the same modification, i.e. $P^{ES} = P^{SB} = P^{ED}$. In the example, $p = 1/2(100 - 0) = 50$ implies $P^{ES} = P^{SB} = P^{ED} = 80$.
- (ii) When the original contract price, p , allocates a larger share of the *ex ante* surplus, $v - c$, to the seller, $P^{ES} < P^{ED} < P^{SB}$. For instance, in the example, if $p = 55$, then $P^{ES} = 80$, $P^{SB} = 55 + 30 = 85$ and $P^{ED} = 60 + 0.4 \cdot 55 = 82$.
- (iii) When the original contract price, p , allocates a larger share of the *ex ante* surplus, $v - c$, to the buyer, $P^{SB} < P^{ED} < P^{ES}$. For instance, in the example, if $p = 45$, then $P^{ES} = 80$, $P^{SB} = 45 + 30 = 75$ and $P^{ED} = 60 + 0.4 \cdot 45 = 78$.⁴⁸

⁴⁶ See Kahneman et al, 76 *Amer Econ Rev* 728 (cited in note 31). "When the reference profit of a firm is threatened, however, it may set new terms that protect its profit at the transactor's expense." *Id.* at 730.

⁴⁷ *Id.* at 731-732.

⁴⁸ More generally, recall that $P^{ES} = 1/2(v + C)$, $P^{SB} = p + 1/2(C - c)$ and $P^{ED} = C + (v - C) \cdot (p - c)/(v - c)$, and note that $p = 1/2(v + c)$ implies an equal division of the *ex ante*

The relative importance of the three fairness concepts can affect the credibility of the seller's threat to breach. When fairness requires a more substantial modification of the original contract, namely a larger increase of the contract price, the credibility-bolstering effect of fairness will likely be greater. Therefore, if the original contract price, p , allocates a larger share of the *ex ante* surplus, $v - c$, to the seller, the SB concept of fairness will provide most credibility, the ED concept will provide less credibility and the ES concept will provide least credibility. Conversely, if the original contract price, p , allocates a larger share of the *ex ante* surplus, $v - c$, to the buyer, the ES concept of fairness will provide most credibility, the ED concept will provide less credibility and the SB concept will provide least credibility. Finally, if the original contract price, p , implements an equal split of the *ex ante* surplus, $v - c$, all three fairness concepts will have the same effect on the credibility of the seller's threat to breach.

After discussing the possible concepts of a fair outcome, we now turn to analyze the influence of fairness concerns on the seller's bargaining behavior at the modification stage. For this purpose, we do not distinguish between the three fairness concepts and the three "fair" prices implied by them, P^{ES} , P^{SB} and P^{ED} , and rather refer to a generic fair price P^F .

C. "Unfairness Costs" and Credibility⁴⁹

Acknowledging the potentially important impact of fairness concerns does not mean that the seller will invariably insist on the fair outcome (specifically, on the fair price P^F). Even when a seller cares about fairness, he will generally still care about his material payoffs as well. Thus, behavior will be the result of a balance between a party's material interests and his fairness concerns. Such a balance requires the definition of a measure of unfairness and a quantification of the cost of unfairness.

In the present context, fairness is not an all-or-nothing concept. For instance, if the fair price is $P^F = 100$, an actual price of 90 will be considered more fair, and an actual price of 50 will be considered less fair. For simplicity, let $P^F - P$ measure the degree of unfairness of the price P . Accordingly, we can say that a seller, who performs in ex-

surplus. Hence, the results stated in the claim can be derived as follows. Comparing P^{ES} and P^{SB} , it can be readily shown that $P^{ES} \geq P^{SB}$ if and only if $p \leq 1/2(v + c)$. Comparing P^{ES} and P^{ED} , it can be readily shown that $P^{ES} \geq P^{ED}$ if and only if $p \leq 1/2(v + c)$. And, comparing P^{SB} and P^{ED} , it can be readily shown that $P^{ED} \geq P^{SB}$ if and only if $p \leq 1/2(v + c)$.

⁴⁹ This sub-section borrows from Oren Bar-Gill and Chaim Fershtman, *Law and Preferences*, mimeo, Harvard Law School (2002).

change for a price P bears a fairness cost of $\sigma \cdot [P^F - P]$, where $\sigma \in [0, \infty)$ represents the level of the seller's fairness concern.^{50,51}

As noted above, the seller will balance material interests with fairness concerns to determine his bargaining behavior.⁵² In particular, the balance of these two considerations will determine the seller's reservation price at the renegotiation stage:

$$\Delta p_s = \frac{1}{1 + \sigma} \cdot [C - p - D_s] + \frac{\sigma}{1 + \sigma} \cdot [P^F - p].^{53}$$

Consider first a seller with no fairness concerns, i.e. $\sigma = 0$, who is guided by material interests alone. At the renegotiation stage, whenever $C - p < D_s$ this seller will have a zero reservation price and there will be no modification. At the other extreme, a seller with very strong fairness concerns, i.e. $\sigma \rightarrow \infty$, will insist on the fair price, and his reservation price would be $\Delta p_s = P^F - p$.

Between these two extremes, a stronger fairness concern increases

⁵⁰ Generally, our account of fairness assumes that an individual wishes to be treated fairly and suffers if he is not treated fairly. This "individualistic" account of fairness is supported by empirical findings. Neale and Bazerman, *Cognition and Rationality in Negotiation* at 163-64 (cited in note 31) (advantageous inequity is preferred over disadvantageous inequity); Ochs and Roth, 79 *Amer Econ Rev* 335 (cited in note 42); see also Huck and Oechssler, 28 *Games & Econ Behav* 13 (cited in note 34); Gary E. Bolton, *A Comparative Model of Bargaining: Theory and Evidence*, 81 *Amer Econ Rev* 1096, 1110 (1991).

⁵¹ The σ parameter can also represent the intensity of the emotional response to an unfair deal. As Robert Frank notes: "[s]tandards evoke an emotional response," and specifically breach of fairness standards can trigger emotions in the modification context. Frank, *Passions Within Reason* at 157 (cited in note 1). More generally, Frank observes that "[t]he rationalists speak of tastes, not emotions, but for analytical purposes, the two play exactly parallel roles. Thus, for example, a person who is motivated to avoid the emotion of guilt may be equivalently described as someone with a "taste" for honest behavior." Id. at 15. Emotions and "tastes" (i.e. preferences for fairness) are often used interchangeably in these contexts. See, e.g., Rabin, 83 *Amer Econ Rev* 1281 (cited in note 34); Jack Hirshleifer, *On the Emotions as Guarantors of Threats and Promises*, in J. Dupre, ed, *The Latest on the Best: Essays on Evolution and Optimality* 322 (MIT, 1987).

⁵² Our formulation of the "unfairness cost" relates to the following observation by Robert Frank: "A behavioral predisposition, in economic terms, is thus much like a tax on not behaving in a particular way." Frank, *Passions Within Reason* at 6-7 (cited in note 1).

⁵³ The seller's reservation price is formally derived as follows. If a price increase of Δp is agreed upon, the seller's utility from performing the modified contract is given by $U_s \equiv y_s + p + \Delta p - C - \sigma \cdot [P^F - (p + \Delta p)]$, where y_s is the seller's income. On the other hand, if the seller breaches the contract, his utility will be: $U_s \equiv y_s - D_s$. Comparing the seller's performance utility and breach utility, we can derive the seller's reservation price at the renegotiation stage. (The expression for the seller's reservation price provided in the text assumes $P^F > p + \Delta p$.)

the seller's reservation price, $\Delta p_s / \partial \sigma > 0$. In particular, there exists a threshold value $\hat{\sigma} = D_s - C + p/P^F - p$, such that sellers with weaker fairness concerns, $\sigma < \hat{\sigma}$, will not have a credible threat to breach (i.e. their reservation price will be zero), and seller's with stronger fairness concerns, $\sigma > \hat{\sigma}$, will have a credible threat to breach (i.e. their reservation price will be positive).

A seller's preference for fairness transforms empty words into a credible threat to breach.⁵⁴ In his book, *Passions within Reason: The Strategic Role of the Emotions*, Robert Frank notes:

a person who is known to "dislike" an unfair bargain can credibly threaten to walk away from one, even when it is in her narrow interest to accept it. By virtue of being known to have this preference she becomes a more effective negotiator.⁵⁵

V. IRRATIONALITY IN MODIFICATION DOCTRINE—CASE DISCUSSION

Recognizing the credibility of "irrational" threats can shed different light on some of the prominent cases in the law of contract modification. These are cases in which courts decided not to enforce the modification agreement, decisions that most commentators and subsequent courts have endorsed. The analysis in this paper suggests that non-enforcement may have been an undesirable result.

Consider, first, the classic casebook favorite *Alaska Packers v. Domenico*.⁵⁶ A group of seamen aboard a fishing vessel, hired under a contract that entitled them to a wage of \$50 for the season and 2¢ for each fish they caught, went on strike soon after the season had be-

⁵⁴ Compare to Schelling's description of the power of principles: A threat based on a "principle" is more powerful/credible. In the modification context, the seller's threat, when based on fairness principles, gains credibility. See Thomas C. Schelling, *The Strategy of Conflict* 34 (Harvard, 1960).

⁵⁵ Frank, *Passions Within Reason* at 5 (cited in note 1). For this reason preferences for fairness can be expected to evolve endogenously. See, e.g., Huck and Oechssler, 28 *Games & Econ Behav* 13 (cited in note 34); Bar-Gill and Fershtman, *Law and Preferences* (cited in note 49). As noted by Jack Hirshleifer: "The economist must go beyond the assumption of "economic man" precisely because of the economic advantage of not behaving like economic man—an advantage that presumably explains why the world is not populated solely by economic men." Hirshleifer, *On the Emotions as Guarantors of Threats and Promises* (cited in note 51). Some of those opposed to the view that emotions can serve as commitment devices agree nevertheless that emotions, which are "hardwired" to preserve norms of cooperation, may occasionally be invoked outside their rational realm. See, e.g., Binmore, *Game Theory and the Social Contract* (cited in note 6).

⁵⁶ 117 F 99 (9th Cir 1902).

gun, demanding a wage increase. Unable to find substitute workers, and expecting large losses if work did not resume (such that could not be recovered from the judgment-proof seamen), their employer agreed to modify the contract and increase the fixed component of the wage to \$100. At the end of the season, after the seamen completed their obligations satisfactorily, the employer refused to pay the modified wage. The seamen sued to recover this increment.

The Court of Appeals reversed the decision of the Court of Admiralty and decided not to enforce the modification. It explained that the employer's consent to the wage increase was coerced, being extracted at a time in which he was most vulnerable, having no adequate remedies or substitutes. Indeed, contract law commentary in the hundred years since has branded this case as the prototype gun-to-the-head case, suggesting that the seamen timed their threat opportunistically so as to maximize the employer's vulnerability.⁵⁷ The result seems logical and desirable.⁵⁸

The decision in *Domenico* was reached under the duress principle. Would a different result be mandated had the court utilized the credibility principle? While the analysis would have to focus on the incentives of the threatening employees rather than on the perspective of the threatened employer, it has been suggested that the result would not change. Under the view that the seamen's threat was strictly opportunistic, it is clear that they would not have carried it out. Had the employer rejected their demand, they would have been better off returning to work than breaching the contract and losing the entire season's worth of wages. Accordingly, the reluctance of the law to enforce the modification provides the desirable effect of deterring similarly situated parties from making their non-credible hold-up threats in the first place.⁵⁹

But a different account has also been suggested. In their complaint, the seamen argued that their modification demand came as a result of their realization that the fishing equipment was in poor shape, thereby reducing the expected volume of the catch and their corresponding per-catch compensation. In fact, a careful study of the cir-

⁵⁷ See, e.g., Chirelstein, *Concepts and Case Analysis in the Law of Contracts* at 70 (cited in note 14).

⁵⁸ Richard A. Posner, *Economics Analysis of Law* 110 (Aspen Law & Business, 5th ed 1997) ("This is the correct economic result.").

⁵⁹ Richard A. Posner, *Gratuitous Promises in Economics and Law*, 6 J Legal Stud 411 (1977) ("Alaska Packers is 'a clear case of where the motive for the modification was simply to exploit a monopoly position conferred on the [fishermen] by the circumstances of the contract'; Chirelstein, *Concepts and Case Analysis in the Law of Contracts* at 70, 72 (cited in note 14).

cumstances of this case shows that the seamen had many reasons to be upset.⁶⁰ For one, the entire fixed component of their wage (\$50) was deducted as a "recruitment fee." Being dependent solely on the per-fish bonus, they realized, as they arrived in Alaska, that more employees than they anticipated would share these bonuses, reducing their income. In fact, the 82 seamen who were part of the strike were all new to this particular cannery, and they discovered that the veteran fishermen—all of different ethnic background—were earning higher salaries for equivalent tasks. Further, while there was genuine dispute whether the recycled fishing nets supplied to the seamen were of inferior quality, it is quite clear that the seamen genuinely thought they were, and had difficulty utilizing those nets effectively.

Thus, learning that their overall income would be less than anticipated, due to what they perceived as the fault of their employer, and realizing that they were treated less favorably than their co-employees, the seamen may have come to regard the terms of their contract as unfair. From this perspective, it might well be that the seamen were willing to forgo whatever remaining wage they would earn, in order to avoid what they considered an exploitative and unfair compensation, one that falls short of what they initially expected to get and what others get for identical effort.

In its decision, the trial court rejected offhand this possible motivation. It held that the seamen's claim that the equipment was defective is "highly improbable," but it did so solely on the "self-evident" grounds that it was against the employer's interest to provide equipment that would diminish his own profits.⁶¹ The trial court nevertheless decided to enforce the modified contract, reasoning that the modification was necessary to avoid the even less desirable result for the employer, of uncompensated breach. Apparently, the trial court too was under the impression that but for the modification the seamen would have remained on strike. In other words, the court considered the seamen's threat, although irrational, credible.⁶² On the

⁶⁰ Debora L. Threedy, *A Fish Story: Alaska Packers v. Domenico*, 2000 Utah L Rev 185 (2000).

⁶¹ *Domenico v. Alaska Packers*, 112 F 554, 556 (9th 1901). Under Threedy's account, however, the seamen's claim appears more plausible. In that particular season, due to the abundance of salmon, the employer's interest may well have been to limit the volume of the catch, as it already exceeded the capacity of the cannery. The seamen were needed primarily as sailors, not fishermen. *Threedy*, 2000 Utah L Rev at 209-212 (cited in note 60).

⁶² *Domenico*, 112 F at 559 stating:

The reason why the defendant did not choose to rely upon the original agreement, and bring an action for the damages occasioned by its breach, may have been, and probably was, because of the inability of the libellants to respond in damages. Under such circumstances it would be strange, indeed, if the law

basis of the underlying circumstances, and recognizing the seamen's state of mind, this impression is quite plausible.

Another illustration of the implications of fairness concerns on the credibility of the threat to breach is the famous case of *Lingenfelder v. Wainwright Brewery Co.*⁶³ In that case, an architect who was hired to oversee the construction of a brewery threatened to cease work unless his fee was increased. Here, unlike the typical modification of a construction contract, the reason for the demand was not an unexpected increase in the actual cost of performance, but rather the architect's disappointment from not being awarded the second and highly profitable phase of the project: installation of the refrigeration plant in the brewery. The court, in accordance with the consideration doctrine that governed the problem of modification at the time, held that no new consideration was provided by the architect to justify his increased pay: "under the new promise, he was not to do any more or anything different."⁶⁴ The court highlighted the coercion under which the brewery's acquiescence was extracted, given the loss of time and money that would be involved in finding a replacement.

While this case appears as another prototype hold-up example, where the threat to breach is opportunistic and non-credible, a careful reading may suggest otherwise. The referee who adjudicated the case and who ruled against the architect found that when the architect learned that one of his competitors was picked for the profitable refrigeration project, "he felt disappointed, aggrieved, angry." Indeed, we are told that the threat to breach was not mere words; immediately after being notified of the brewery's decision to pass him over, the architect "took away his plans, called off his superintendent on the ground, and notified Mr. Wainwright that he would have nothing more to do with the brewery."⁶⁵ This action was not a strategic display of false emotions, a bluff. The testimony offered in this case suggests that for a period of two months, the architect refused to return to the site, did not respond to daily telephone and mail communications, and eventually returned only upon the intervention of an intermediary—his close friend Adolphus Busch.⁶⁶ It appears that the architect made significant efforts to secure the refrigeration project. In terms

would not permit the defendant to . . . enter into [a] contract mutually beneficial to all the parties thereto, in that it gave to the libellants reasonable compensation for their labor, and enabled the defendant to employ to advantage the large capital it had invested in its canning and fishing plant.

⁶³ 15 SW 844 (Mo 1891).

⁶⁴ Id. at 848.

⁶⁵ Id. at 846.

⁶⁶ Transcript of testimony of Ellis Wainwright, *Lingenfelder v. Wainwright Brewery* at 158-59 (unpublished, St. Louis Cir Ct, October Term 1885).

of the analysis above, the architect's profit declined unexpectedly when he was overlooked for the second phase of the project. He deemed this to be unfair, and was willing to forgo the small profit under the original agreement in order to avoid working for a client that treated him in this manner.

We can only speculate whether the threats in *Domenico* and in *Lingenfelder* were credible. Accordingly, it would be an overstatement to suggest that the decisions in these cases were wrong. Recognizing the role of fairness motivations, our analysis of these cases yields at least a tentative claim: to the extent that the threats were motivated by an emotional reaction to what the threatening parties considered an unfair deal, and that this emotional reaction was sufficiently intense to render credible the threats to breach, the decisions in these cases are detrimental to the interests of the *threatened parties*. If indeed the threats were credible, the legal restriction on the ability to extract a modification will only induce the threatening parties, and parties similarly situated, to breach the contract.

Finally, it should be emphasized that the analysis in this paper is *normative*. It addresses the question—'when should modifications be enforced?' It is not a positive analysis, for it does not suggest that case decisions conform to the enforcement principle developed here. In fact, the two leading cases examined above, as well as our companion study of contract modifications,⁶⁷ convinced us that courts more often than not overlook the credibility condition. Nevertheless, modification doctrine can be interpreted to incorporate the type of fairness motivations studied here. For example, Section 89 of the Restatement provides that a modification should be binding if it is "fair and equitable in view of circumstances not anticipated by the parties when the contract was made." While the current application of the "fair and equitable" requirement has not been linked to the credibility of the threat to breach, Section 89 could be interpreted to support such a link. That is, when the fairness concerns rise to the magnitude that would induce the threatening party to breach the unmodified contract, the modification ought to be enforceable. A similar reinterpretation could be proposed for the "good faith" requirement in U.C.C. §2-209.

VI. CONCLUSION

Whether a threat to breach is rendered credible as a result of the fairness and emotional motivations of the kind identified in this paper

⁶⁷ Bar-Gill and Ben-Shahar, *The Credibility of Threats to Breach* at Part V (cited in note 5).

might be a difficult determination to make. It requires the decision maker to trace the emotions and the state of mind of the threatening party, not merely his objectively verifiable pecuniary interests. These are variables that do not lend themselves to straightforward quantification and comparison, thus it is not always clear whether they exist, and—if they exist—whether they are sufficiently intense to overcome the rational, strictly pecuniary, calculus. Moreover, in light of the difficulty in verifying the authenticity of such behavioral reactions, parties might be tempted to bluff, to appear angrier and more insulted than they really are, and thus convince their counterparts (and courts) that their threats are credible. As Robert Frank recognized, there may be a strategic advantage to an emotional facade.⁶⁸ Further, as with many emotional responses, what initially, at the time of the threat, may well have been an authentic display of a fairness-based sentiment, may subside over time. In particular, when the time comes to carry out the threat, the irrational considerations that supported it at the outset may diminish. That is, the credibility characteristic of the threat may wear away.

Indeed, it would be plausible to conclude that fairness-based concerns cannot provide a threat with the same dependable and verifiable basis of credibility as “hard” pecuniary concerns. It is tempting, then, to ignore this set of motivations in designing legal policy. But the fact that transactors’ fairness considerations are difficult to verify does not mean that they are non-existent. Ignoring them will not make them go away. To the extent that these motivations nevertheless exist, failing to account for them may give rise to undesirable legal policy. The fact that transactors do not have a rational basis for their threat to breach does not mean that they also do not have an irrational basis for their threat.

Hence, the conclusion this paper proposes is tentative: if it is evident that a threat to breach a contract was motivated by an irrational yet credible drive, the resulting modification ought to be enforceable. Failure of the law to enforce the modification will not serve to uproot such irrational conduct.⁶⁹ It will merely hamper the ability of the

⁶⁸ Frank, *Passions Within Reason* (cited in note 1). Frank also notes the problem of mimicry, where a party might pretend to have credibility enhancing emotions or fairness concerns. Frank argues, however, that genuine emotions and fairness concerns often have observable symptoms such as involuntary body language. Therefore, for instance, it is easier for a truly angry person to appear angry. *Id.* at 9-12. But see Binmore, *Game Theory and the Social Contract* at 339-40 (cited in note 6).

⁶⁹ It should be noted, as a theoretical possibility, that failure of the law to enforce modifications that result from fairness-driven threats might reduce the prevalence of such fairness motivations. A transactor’s sense of unfairness can be reinforced under a regime that gives recognition to such sentiments, and—conversely—can be mitigated under a regime that denies their existence.

threatened party to commit to a modification, confining her to the less desirable outcome of breach.

As with any tentative conclusion, its importance depends on the empirical validity of the underlying premise. It remains for future work to explore, both experimentally and by case analysis, the extent to which threats to breach are motivated by “irrational,” fairness-oriented, concerns.