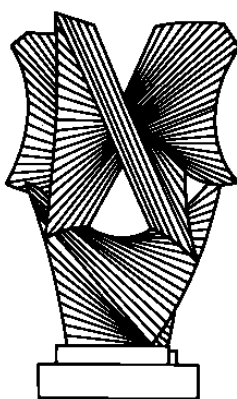


CHICAGO

JOHN M. OLIN LAW & ECONOMICS WORKING PAPER NO. 450
(2D SERIES)



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THE UNIVERSITY OF CHICAGO

January 2009

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AN INFORMATION THEORY OF WILLFUL BREACH

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Forthcoming, Michigan Law Review (2009)

Should willful breach be sanctioned more severely than inadvertent breach? Strikingly, there is sharp disagreement on this matter within American legal doctrine, in legal theory, and in comparative law. Within law-and-economics, the standard answer is “no”—breach should be subject to strict liability. Fault should not raise the magnitude of liability in the same way that no-fault does not immune the breaching party from liability. In this paper, we develop an alternative law-and-economics account, which justifies super-compensatory damages for willful breach. Willful breach, we argue, reveals information about the “true nature” of the breaching party—that he is more likely than average to be a “nasty” type who readily chisels and acts in dishonest ways, and may have acted in other self-serving, counter-productive ways, which went undetected and unpunished. Willful breach triggers extra resentment for what underlies it—for all the other bad things that the breaching party likely did, or, more basically, for the ex ante choice he made to engage in such pattern of behavior. Thus, when the party is caught in the act of willful breach, he is punished not merely for this act, but for the (probabilistically) inferred mesh of bad conduct. This account provides a concrete foundation for the notion that willful breach violates the “sanctity of contract.” We show that some remedial doctrines are consistent with the information-based account.

Introduction

A. *The Puzzle*

Is willful (opportunistic) breach worse than inadvertent breach? Is it more wrongful and deserving of a harsher sanction?

Strikingly, two opposite views now have a longstanding tradition within contract law, and they have not been successfully reconciled. On one end, the official position of the common law, as expressed in the Restatement (Second) of Contracts, is that the intent to breach is largely irrelevant:

The traditional goal of the law of contract remedies has not been compulsion of the promisor to perform his promise but compensation of the promisee for the loss resulting from breach. “Willful” breaches have not been distinguished from other breaches In general, therefore, a party may find it advantageous to refuse to perform

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a contract if he will still have a net gain after he has fully compensated the injured party for the resulting loss.¹

The remedies available to an aggrieved party do not depend on notions of fault or “mens rea” of the breaching party. Subject to narrow exceptions carved by doctrines like excuse, there is no room for any inquiry as to why breach occurred.

This strict liability approach to breach of contract has come to be known as the Holmesian approach, described here by Gilmore:

[T]he contract-breaker’s motivation, Holmes explained, makes no legal difference whatever and indeed every man has a right “to break his contract if he chooses”—that is, a right to elect to pay damages instead of performing his contractual obligation. Therefore the wicked contract-breaker should pay no more in damages than the innocent and the pure in heart.²

This view is explained and supported by the standard law-and-economics account that the optimal remedial regime is strict liability.³ Since the main goal of remedies is to provide incentive to breach or to perform, all that matters is to equate the remedy to the harm. Intentional breach is no different than negligent or innocent failure to take precautions—all ought to be subject to the same sanctions, and in general the expectation remedy is sufficient to provide optimal deterrence.⁴ Indeed, the law-and-economics notion of efficient breach, as well the Holmesian notion of a contractual promise being no more than an option to breach and pay damages, does not consider compensated breach to be wrongful. In fact, if it is efficient, it may be commendable. A willful efficient breach need not be deterred, merely priced, and the price tag need not include a fault premium.

On the other end, there is a more popular and intuitive sentiment that regards willful breach—even if followed by full compensation—as opportunistic and wrongful, and which rejects the alleged normative equivalence between deliberate and inadvertent breach. For example, the drafters of the Restatement (Third) of Restitution have proposed a unique remedy to deal with deliberate breach: disgorgement of the breaching party’s benefit from breach.⁵ It is wrongful, the drafters presumably

1. **Restatement (Second) of Contracts** ch. 16, introductory n. (1981).

2. **Grant Gilmore, The Death of Contract** 14–15 (1974) (footnote omitted) (quoting **Oliver Wendell Holmes, The Common Law** 236 (Mark DeWolfe Howe ed., 1963) (1881)).

3. *E.g.*, **Richard A. Posner, Economic Analysis of Law** 118–26 (7th ed. 2007); Steven Shavell, *Is Breach of Contract Immoral?*, 56 **Emory L.J.** 439 (2006).

4. Lucian Arye Bebchuk & I.P.L. Png, *Damage Measures for Inadvertant Breach of Contract*, 19 **Int’l Rev. L. & Econ.** 319, 329 (1999); Robert Cooter, *Unity in Tort, Contract, and Property: The Model of Precaution*, 73 **Cal. L. Rev.** 1, 32 (1985); Richard Craswell, *Precontractual Investigation as an Optimal Precaution Problem*, 17 **J. Legal Stud.** 401, 425–28 (1988).

5. **Restatement (Third) of Restitution and Unjust Enrichment** § 39 cmt. a (Tentative Draft No. 4, 2005) (“[Section] 39 describes a disgorgement remedy: a claimant under this Section may recover the defendant’s profits

concluded, to gain a benefit from intentional disregard for a contractual obligation, and any such benefit ought be stripped in full and recovered by the breached against party. Even within mainstream contract law, there are various ways in which the fault and willfulness of breach matter for the magnitude of damages.⁶ One need only recall Cardozo’s famous dicta: “The willful transgressor must accept the penalty of his transgression. For him there is no occasion to mitigate the rigor of implied conditions. The transgressor whose default is unintentional and trivial may hope for mercy if he will offer atonement for his wrong.”⁷

This added hostility towards willful breach is common in continental European contract law systems. For example, under French and German law intentional breach raises the magnitude of liability to cover not only the foreseeable harm, but also any unforeseeable harm.⁸ This sentiment is also widely supported by commentators.⁹ Significant evidence also suggests that transactors consider willful breach as more wrongful than inadvertent breach and expect it to be more severely sanctioned.¹⁰

Thus, we observe two opposite views, one that deems fault to be irrelevant and another that attaches harsher consequences to different types of willful, blameworthy, breach. How can we reconcile the tension between these two polar approaches? If all that matters is the harm caused by breach, why is the intent of the breaching party relevant as a factor that increases the remedy?

B. The Traditional Explanation

The traditional explanation for the hostile sentiment towards willful breach invokes notions of “the sanctity of contract.”¹¹ Willful breach is worse, so goes the argument, because it undermines more than just the expectation of the current promisee; it demonstrates indifference and disregard towards the “institutions” of contractual commitment and of trustworthiness, and it conflicts with the fundamental

from breach, even if they exceed the provable value to the claimant of the defendant’s defaulted performance.”). Restatement (Second) of Contracts also recognizes the role of fault. See Patricia H. Marschall, *Willfulness: A Crucial Factor in Choosing Remedies for Breach of Contract*, 24 *Ariz. L. Rev.* 733, 734–37 (1982) (collecting Restatement sections where fault and/or willful/intentional breach play a role).

6. See, e.g., George M. Cohen, *The Fault Lines in Contract Damages*, 80 *Va. L. Rev.* 1225 (1994); Richard Craswell, *When is a Willful Breach ‘Willful’?: A Puzzle and Two Different Economic Solutions*, 107 *Mich. L. Rev.* ____ (2009); Marschall, *supra* note 5.

7. *Jacob & Youngs, Inc. v. Kent*, 129 N.E. 889, 891 (N.Y. 1921) (citations omitted).

8. **James Gordley, *Foundations of Private Law: Property, Tort, Contract, Unjust Enrichment*** 408-11 (2006); Barry Nicholas, *Fault and Breach of Contract*, in **Good Faith and Fault in Contract Law** 337, 338-40 (Jack Beatson and Daniel Friedmann, Eds., 1995)

9. Bruce Chapman and Michael Trebilcock, *Punitive Damages: Divergence in Search of a Rationale*, 40 **Alabama L. Rev.** 741, 764-772 (1989); Daniel Friedmann, *The Efficient Breach Fallacy*, 18 **J. Legal Stud.** 1, 13–23 (1989); Ian R. Macneil, *Efficient Breach of Contract: Circles in the Sky*, 68 **Va. L. Rev.** 947 (1982).

10. See Lisa Bernstein, *Private Commercial Law in the Cotton Industry: Creating Cooperation Through Rules, Norms, and Institutions*, 99 **Mich. L. Rev.** 1724, 1733–34 (2001).

11. See Cohen, *supra* note 6, at 1230; Craswell, *supra* note 6; Friedmann, *supra* note 9, at 3–4; Marschall, *supra* note 5, at 739–41.

maxim of pacta sunt servanda.¹² Stated differently, a contractual right entitles a party to the peace of mind that a property right holder enjoys—the right not to be encroached upon. Deliberate breach is like theft: it undermines this security and diminishes the value of the right.¹³

The problem with the “sanctity of contract” account is that it assumes the conclusion: it does not explain why the contractual “institution” is violated by willful-but-compensated breach; instead, it assumes that promisees, or members of the community, will suffer additional deprivation if the breach is deliberate, in the same way that they feel violated when their property is transgressed. For most contracting parties, however, a contract is not a gospel subject to some perceived sanctity, but merely a mutually advantageous instrumental arrangement that is negotiated in order to create value. Why condemn an attempt by one party to increase the overall contractual pie through, say, a willful search for more profitable opportunities? If such opportunities benefit one party and do not harm the other, why are they regarded with distaste? As argued by many law-and-economics writers, and most recently by Shavell, had the parties written a complete contract that anticipates potential breach opportunity, they would likely have included an express term releasing the promisor from the obligation to perform any time it turns out to be inefficient.¹⁴ That is, the parties would have made a specific arrangement that permits deliberate breach—in fact, encourages it—if only it is fully compensated (either ex-post through damages or ex ante through a price adjustment). If they could be made better off by allowing a deliberate breach to occur, why should they be saddled with the costly burden of the sanctity of contract?

Thus, to those who regard a contract as a vehicle for promoting the contracting parties’ legitimate commercial interests there remains a puzzle: how is it that willful breach is considered, even by sophisticated parties, faulty and wrongful? Why are parties resentful to a practice that, at its core, appears to be joint welfare maximizing? Why do businessmen reject the notion of efficient breach? Is there a more subtle reason why a willful breach is perceived to justify super-compensatory damages?

C. An Information-Based Explanation

We argue that willful breach triggers a stronger resentment not because of the harm it causes, but rather because of the harm it reveals. Willful breach is not any more harmful, nor does it infringe any broader societal interest. There is no sanctity to contract and no social institution or public good is being violated by willful breach. Rather, willful breach is a probabilistic indication that the breaching party is the type of transactor who readily chisels and acts in a dishonest way, and has likely exercised such bad faith in other occasions without being sanctioned. An act of willful breach reveals the true nature of the contracting partner: one who would take any opportunity to divert value, if he can get away with it. This

12. See FH 20/82 Adras Bldg. Material Ltd. v. Harlow & Jones GmbH [1988] IsrSC 42(1) 221, translated in 3 Restitution L. Rev. 235 (1995).

13. See Friedmann, supra note 9, at 3.

14. Steven Shavell, Foundations of Economic Analysis of Law 308 (2004); Shavell, supra note 3, at 441.

party may act in other self-serving, counter-productive ways, but they often go undetected and unpunished. Occasionally, when this party's opportunistic act is observed and its true nature is revealed, it triggers resentment for what underlies it—for all the other bad things that he likely did, for the choice he made to engage in this pattern of behavior. That is, when this party is caught in the act of willful breach, he is punished not merely for this act, but for being a nasty type.

Intuitively, this idea tracks a common sentiment experienced by parties who are subject to deliberate breach. Often, it is not the deprivation resulting from the immediate breach that creates a sense of exploitation for the aggrieved parties, but rather the realization that their partner was not as honest and dependable as they perceived—that he is the type of partner who cares less about their expectations and who would chisel if he can get away with it. Is this why passengers dislike airlines' overbooking strategy? Surely, these passengers do not experience any immediate loss from what is in fact a deliberate booking strategy that leads to occasional non-performance (indeed, they often line up to receive the offered compensation). But it is perceived as a symptom of a ruthless strategy of poor service, of skimming off various passenger privileges. They are angry for what is revealed to be this underlying non-friendly pattern of treatment.¹⁵

This is also, we believe, why individuals are offended by a breach that is motivated by the breaching party's desire to serve a higher bidder. These breaches are fully detected and compensated, and are probably efficient. But they leave the breached-against party angry for the way he was treated. What underlies this resentment is not necessarily that the present breach was not bargained for, but the realization of the victim that his contracting partner is the type who could potentially commit other unpleasant acts to benefit himself.

To be sure, this explanation is not in conflict with notions of "sanctity of contract." It provides, however, a grounding for this notion. The sanctity of contract is infringed not by the willful breach per se, but by the propensity to disregard the full scope of the contractual obligation and to chisel away at it. Since every contract is in various ways incomplete, the less-than-fully-specified obligations ought to be performed in a way that preserves the reasonable expectations of the parties. The sanctity of contract, under this view, is nothing more than a reasonable supplementation of underspecified or underenforced terms.

A party infringes the sanctity of contract when he acts in a way that is inconsistent with this expectation. Sometimes it is called bad faith.¹⁶ But since this party can often escape detection, the

15. See, e.g., Micheline Maynard & Michelle Higgins, As Overbooked Flights Rise, So Do Payoffs for the Bumped, **N.Y. Times**, Aug. 23, 2008, at A1. A common sentiment reported is that "overbooking is a conscious fraud, in that the seller has sold a contract knowing that it might not honor that contract." Posting of Dan to <http://community.nytimes.com/article/comments/2008/08/23/business/23bump.html?permid=7> (Aug. 23, 2008, 07:23 EST). One passenger is quoted as saying, "If flights are being overbooked, then what does that say about how the airline runs their business?" Maynard & Higgins, supra.

16. See Mkt. St. Assocs. Ltd. P'ship v. Frey, 941 F.2d 588, 593 (7th Cir. 1991).

sanction needs to be multiplied when the bad faith is detected. If the nasty types were caught every time they misbehaved, there would be no need for super-compensatory sanctions, and no need for a willful breach multiplier.

This imperfect-detection explanation for super-compensatory damages for deliberate breach of contract builds on the economic rationale for punitive damages in torts.¹⁷ It has also been recognized in passing by contracts commentators.¹⁸ In an important way, though, the justification we develop for super-compensatory sanctions differs from these prior imperfect-detection explanations. In a standard imperfect detection account, the offender commits a wrongful act that is detected only by chance. The lower this detection chance, the higher the necessary damage multiplier. This account, however, fails to explain the prevalence of punitive damages in cases of deliberate aggression (the metaphorical “punch in the face”), since those are often the easiest to detect. Indeed, in our account, willful breach is detected with certainty. Thus, even if it were subject only to regular compensatory damages, it would be properly deterred. There is no need, then, for a damages booster to deter the isolated act of willful breach.

Where our account differs from the standard detection rationale is in noting that willful breach is part of an underlying pattern of behavior, most of which is non-detectable.¹⁹ There are other aspects of the promisor’s behavior that are wrongful and yet undetectable. They do not get sanctioned directly. When a willful breach occurs, it indicates that these other wrongful behaviors are (statistically) more likely to have happened than was previously assumed. Given that they went unpunished (and undeterred), the court takes the present damage-infliction opportunity to increase the sanction. Thus, the damages booster that is attached to willful breach accounts for the inferred undetected harm and it is intended to change the underlying incentive to become the type of rent-seeking transactor that exploits opportunities to chisel and perform in sub par fashion.

This feature of the information-based theory, i.e., that one breach reveals information about other, potentially very different breaches, raises the question of scope. How broad and far-reaching are the inferences that courts can draw from a breach of contract? Can a breach of contract teach us that the breaching promisor is a low-integrity type who is also more likely to cheat on taxes or misrepresent insurance claims? Should we raise damages for breach of contract to punish the promisor for this

17. Robert D. Cooter, Economic Analysis of Punitive Damages, 56 **S. Cal. L. Rev.** 79, 79–80 (1982) (intentional wrongdoing reveals information about illicit gains derived by the wrongdoer, requiring higher sanction to deter); A. Mitchell Polinsky & Steven Shavell, Punitive Damages: An Economic Analysis, 111 **Harv. L. Rev.** 869 (1998) (providing an imperfect-detection rationale for punitive damages in tort law).

18. See, e.g., Craswell, supra note 6 (arguing that expected damages for breach are often too low, due to a below 100% probability of suit among other things, and that courts may be justified in characterizing a breach as willful in order to raise damages to the efficient level); Linda Curtis, Note, Damage Measurements for Bad Faith Breach of Contract: An Economic Analysis, 39 **Stan. L. Rev.** 161 (1986) (explaining that super-compensatory damages are an efficient response to imperfect enforcement, resulting from either imperfect detection or from high litigation costs that reduce the probability of suit even when the breach is detected).

19. The “underlying pattern” theory also distinguishes our account from Cooter’s information-based theory. See Cooter, supra note 17. Here, the information that is revealed is not the gain enjoyed by the wrongdoer, but the likelihood that this gain appears systematically in a variety of contexts.

increased likelihood of tax or insurance fraud? We answer the first question with a ‘maybe,’ and the second question with a ‘no.’ Our theory of willful breach is a theory about the optimal design of default rules in contract law. This theory recommends a supra-compensatory damages default when the contracting parties would have adopted such a rule themselves, absent impediments to more complete contracting. The parties would want to impose supra-compensatory damages for a breach that reveals information about other, undetected breaches of their contract. They would not want their contract to subsidize the state’s tax enforcement efforts or insurance companies’ fraud squad.²⁰

As should be apparent by now, our definition of willful breach has nothing to do with the mental state of the breaching promisor. Rather we adopt a functional approach, defining as willful a breach that merits the imposition of supra-compensatory damages, because it reveals information about other undetected breaches. Still, this functional approach resonates with the moral intuitions that separate more and less blameworthy breaches: a breach is more blameworthy if it is the product of an underlying trait or inadequate precaution that links this breach with other (undetected) breaches.

Part I develops the information theory of willful breach. Part II applies this theory to prominent doctrines of willful breach.

I. An Information Theory of Willful Breach

A. *The Model*

In this Section, we present the basic analytical argument through a stylized example. In the next Section we discuss how the argument extends to more general settings.

1. *Framework of Analysis*

Imagine a service contract for a prepaid price. The parties have a complete understanding as to the scope of the work, but cannot fully describe it in the contract, because some aspects of performance are non-verifiable (that is, cannot be proven in court). A useful example to have in mind is a food catering contract—it is hard to prove in court how the food tasted.

Specifically, we make the following assumptions: it is up to the service provider (hereinafter, the “promisor”) to set the quality of performance, which can take one of three level: Standard (“S”), Mediocre (“M”), and Terrible (“T”). Standard performance produced a value of \$50 for the client (the “promisee”). Mediocre performance produces a value of \$40, and Terrible performance produces a value of \$0. Courts can tell when performance is Terrible, but they might or might not be able to distinguish between Mediocre and Standard, and we will consider both cases in the analysis below.

20. The supra-compensatory damages rule increases the contract price that the promisee pays. The promisee is happy to pay this higher price to the extent that she is paying for added incentives to avoid other, undetected breaches. She may be less happy to pay a higher price to bolster the promisor’s incentives to pay taxes.

The cost to the promisor of performance depends on three factors. First, it depends on the quality of performance—S, M, or T—and the better the quality the higher the cost. Second, it depends on a general ex ante investment or effort expended by the seller. We assume that the seller can choose either High (“H”) or Low (“L”) investment. L costs \$0; H costs \$25. Intuitively, this investment can be in things like inventory, special skill, market contacts, high-end equipment—anything that is costly and renders the expected performance quality higher and/or reduces the cost of high-quality performance. This investment does not have to be relationship-specific. Third, the cost of performance depends on some random factors that cannot be influenced by the parties (such as price of materials, climate effects). We assume, for simplicity, that these random factors can have one of two realizations, Good (“G”) or Bad (“B”). Prior to the contract, these random factors are summarized by a probability distribution. We denote by q (a number between 0 and 1) the probability that the state-of-nature will be G; $1-q$ is therefore the probability that the state of nature will be B. In state G, performance costs are generally lower than in state B.

We assume that the three factors affect the cost of performance as follows:

Figure 1
Cost of Performance to Promisor in Dollars

Quality of Performance	High Investment		Low Investment	
	G-state	B-state	G-state	B-state
Standard	0	20	25	100
Mediocre	0	20	20	75
Terrible	0	0	0	0

Notice that the cost of Terrible performance is assumed to be always \$0 (recall that it also produces a value of \$0). Otherwise, High investment makes it cheaper to produce S quality regardless of the state of nature. High investment also reduces the cost differential between M quality and S quality, and for expositional purposes we assume a zero cost differential between M and S.²¹ With Low investment, M quality is cheaper to produce than S quality. Finally, notice that there is one contingency—Low investment, Bad state—for which the cost of performance is higher than the value.

The timing of the model is the following: At time 0, the promisor makes an investment (H or L) that is unobservable to the client and cannot be verified in court. At time 1, the parties enter a contract for a fixed price and the client pays the price in full. The contract requires the promisor to provide S quality. At time 2, the state-of-nature realizes, either B or G. At time 3, the promisor chooses the quality of

21. We later discuss the implications of relaxing this assumption. [See infra](#) note 24.

performance, S, M, or T, and incurs the corresponding cost. Finally, at time 4, if the promisor delivers less than S quality, there might be damage consequences imposed by courts.

2. *Efficient Performance*

Should the promisor take the costly High investment? Should he deliver the Standard performance, given the effort he took and the states of nature?

If the promisor takes High investment, the total expected social value,²² $\underline{W}(H)$, is:

$$W(H) = -25 + 50q + (50-20)(1-q) = 5+20q$$

Investment costs \$25; with probability q , the cost for S performance will be 0, hence net value of performance will be 50; and with probability $(1-q)$ the cost of performance will be 20 for S and for M, so given that S creates value of 50 and M a value of only 40, it would be efficient to deliver S, hence net value of performance will be $(50-20)$.

If the promisor takes Low investment, the total expected social value, $\underline{W}(L)$, is:

$$W(L) = (50-25)q + 0 \cdot (1-q) = 25q$$

Investment costs \$0; with probability q , the cost of performance will be 25 for S and 20 for M, so given that S creates value of 50 and M a value of only 40, it would be efficient to deliver S, hence net value of performance will be $(50-25)$; and with probability $(1-q)$, performance will cost 100 for S or 75 for M, so it will be efficient to breach (net value of 0).

Comparing the expected value of High and Low investment, $\underline{W}(H) > \underline{W}(L)$ for all $q < 1$,²³ which means that High investment is socially desirable. The reason is that High ex ante effort, while costly, more than compensates for this added cost by reducing the ex post cost of performance and increasing the net gain from delivering S quality.

3. *Expectation Damages with Perfect Information*

We now turn to examine the incentives of the promisor. We begin with the benchmark case in which courts can distinguish between the different qualities of performance. Here, the client will be able to recover expectation damages of \$10 when quality is M or \$50 when quality is T.

If the promisor takes High investment, then his expected cost, $\underline{C}(H)$, will be:

$$C(H) = 25 + q \cdot 0 + (1-q) \times 20 = 45-20q$$

22. The total expected social value is a measure of all the pecuniary effects attributed to the promisor's investment. In this model, the total expected social value includes the cost of the investment and the net value of performance that is expected to arise.

23. Recall that q is the probability of the Good state of nature and thus by definition it cannot be greater than 1.

Investment costs \$25; with probability q , the cost for S quality (to which he is obligated under the contract) will be 0; and with probability $(1-q)$ the cost will be 20 for S and for M, and, given the liability that M entails, it would be better to deliver S.

If the promisor takes Low investment, then his expected cost, $\underline{C}(\underline{L})$, will be:

$$C(L) = q \cdot 25 + (1-q) \cdot 50 = 50 - 25q$$

Investment costs \$0; with probability q , the cost of performance will be 25 for S and 20 for M, and since M leaves him with liability of \$10, he will choose S and avoid the liability; with probability $(1-q)$ the cost of performance will be 100 for S or 75 for M, so the promisor will breach and pay \$50 damages.

Comparing the private payoff for the two investment levels, we can see that $\underline{C}(\underline{H}) < \underline{C}(\underline{L})$ for all $q < 1$, which means that the promisor will always choose the socially optimal High investment level. The difference between the private costs of H and L is exactly equal to the difference between the social value from H and L, for the familiar reason that expectation damages provide full internalization. Nothing in the current model alters this benchmark.

4. *Expectation Damages with Imperfect Information*

The key assumption we will make now is that courts cannot detect Mediocre quality and cannot assess damages for the difference between Standard and Mediocre. This is why we introduced the Mediocre level into the model: to capture the notion that performance can deviate from what is promised in ways that are clear to the parties but are too subtle for courts to see (e.g., the taste of the catered food). Thus, if the promisor delivers M, he will escape liability and will not have to pay the \$10 decline in expectation value. It will not be surprising to see that when certain breaches go undetected, the promisor is more likely to commit such breaches. We show that this will affect his ex ante choice of investment.

If the promisor takes High investment, his expected cost, $\underline{C}(\underline{H})$, will now be:

$$C(H) = 25 + q \cdot 0 + (1-q) \cdot 20 = 45 - 20q$$

Investment costs \$25; with probability q , the cost for S quality (to which he is obligated under the contract) will be 0; and with probability $(1-q)$ the cost will be 20 for S or for M. Thus, for High investment, the promisor's cost is exactly as under the perfect information benchmark.

If the promisor takes Low investment, then his expected cost, $\underline{C}(\underline{L})$, will be:

$$C(L) = q \cdot 20 + (1-q) \cdot 50 = 50 - 30q$$

Investment costs \$0; with probability q , the cost of performance will be 25 for S and 20 for M, and, since there will be no liability for M, he will choose M and bear a cost of \$20; with probability $(1-q)$

the cost of performance will be 100 for S or 75 for M, so the promisor will breach and pay damages of \$50.

Comparing the private payoff for the two investment levels, we can now see that $C(H) < C(L)$ for all $q < \frac{1}{2}$. Whenever $q > \frac{1}{2}$, the promisor will inefficiently make Low investment. The reason for the distortion has to do with the undetectability of M quality. For L investments, when the state is G the promisor will deliver only M quality and escape liability, thus failing to take into account the full social benefit of High investment in terms of the increase in the (net) value of performance.²⁴

5. Super-Compensatory Damages

When M quality performance cannot be detected, there is no occasion for the court to impose damages for this conduct. The only time the court imposes any kind of damages is when the promisor delivers T quality. So far, we assumed that damages are compensatory, restoring the promisee's expectation of \$50 value. We now show what happens when damages ("D") for T quality are increased above \$50, and demonstrate that this can correct the promisor's ex ante choice of inefficient Low investment.

If the promisor takes High investment, then his expected cost, $C(H)$, will be unchanged relative to the expectation damages regime, since he would never choose T quality and thus would never pay any damages. His cost, $C(H)$, continues to be $45 - 20q$. If, instead, the promisor takes Low investment, then his expected cost, $C(L)$, will be higher relative to the expectation damages regime, because in the B-state he would choose T quality. As long as $D \leq 75$, the promisor will prefer to breach and pay D over performance of M quality at a cost of 75. His cost will thus be:

$$C(L) = q \cdot 20 + (1-q) \cdot D$$

The promisor will choose H, if $C(H) < C(L)$, or:

$$D > \frac{45 - 40q}{1 - q}$$

Note that for $q \leq .5$, $D \leq 50$, which means that no increase in damages above 50 is needed. Of course, $q \leq .5$ is the case in which there is no distortion in the first place and indeed there is no need to correct the promisor's incentives. But for any $q > .5$, which is when (as we saw earlier) the distortion would otherwise occur, the formula above implies $D > 50$. If, say, $q = .75$, then $D = 60$, representing a

24. The argument becomes more nuanced when the cost of S quality exceeds the cost of M quality also with High effort. See *supra* note 18 and accompanying text. In this case, the undetectability of M quality reduces the expected cost of both Low effort and High effort (i.e., even with High effort the promisor will inefficiently choose M quality). Still, this undesirable effect will generally be larger for Low effort, since High effort can be expected to reduce the difference between the ex post costs of S quality and M quality.

20% multiplier over expectation damages or 50. If, instead, $q = .8$, then $\underline{D} = 65$, a 30% multiplier. Thus, as long as q is not too high, the court can correct the distortion in investment effort by imposing super-compensatory damages.²⁵

B. Informal Lessons from the Example

The analysis demonstrates how a party's choice of Low investment can lead this party to breach in situations where, had he taken higher (and more efficient) investment, he would have chosen to perform more adequately. Increased liability for ex-post breach can correct the ex ante incentive to invest.

This analysis can apply to various contexts, but here we want to invoke its possible application to the problem of willful breach. In the model, a promisor who delivered Terrible quality "revealed" himself to be one who made Low investment—it is only when a promisor made such Low investment that he might end up preferring (in the Bad state of nature) to breach, deliver Terrible quality, and pay damages. The reason why a damage multiplier was needed in this situation of Terrible quality was not to achieve full compensation for some excess harm, nor to correct for some under-detection of Terrible quality. It was needed because the information that was revealed suggested that this promisor invested Low effort and thus was more likely to commit undetected breach of a different kind (Mediocre quality) and escape liability in some situations. The added liability was an indirect way to pay for other types of wrongdoing.

In the willful breach analogy, a promisor makes a choice—analagized to the Low/High investment decision—of what type of practices to follow. High investment is analogous to a practice of high integrity: it costs more to build, but once it is in place it guarantees a higher ability to perform in a satisfactory way. Thus, a party can invest in quality controls, excess capacity, training, information, reputation of its brand, good will and networking—anything that makes it less likely, even if a bad contingency occur, that this party will have an incentive to commit willful breach. When a party does commit willful breach, the inference that is drawn is that this party is of the low integrity or low capacity type, and that this must have put him in a position to occasionally commit various sorts of undetected breach.

The essential assumption that, we believe, makes the model applicable to the willful breach context is the idea that willful breach—or, for that matter, any conduct within a contractual relation—is not an isolated incident that just happens to take place. Rather, it is systematically related to other contractual behaviors, it is part of a pattern, and this propensity is determined by some underlying choice or disposition of the promisor (which itself can be either detectable or undetectable.) We modeled this choice/disposition as an investment that costs money. In the model, once this investment was made, it had

25. If $q \geq .86$, then $\underline{D} > 75$. In this scenario, the promisor will prefer to perform \underline{M} at a cost of 75 rather than \underline{I} and pay damages. For such high q , the promisor will always have a lower expected cost for \underline{L} -effort, and the distortion cannot be corrected. The reason, in the model, is that the promisor who invested \underline{L} still has the option to incur the high cost of performance, in which case there will be no occasion for the court to impose punitive damages.

a systematic effect on two behaviors of the promisor—the frequency of detectable (Terrible quality) and of non-detectable (Mediocre quality) breaches. In the real world, once a party invests in building his integrity and capacity, these have a systematic effect on many behaviors down the road, one of which is the decision to commit willful breach. The party with low integrity is more likely to commit willful breach.

To be sure, willfulness is often thought of as a state of mind, not a failure-to-invest problem. In this sense, the model does not provide an explanation for the specific “mens rea” factor. And yet, the concept of willfulness is notoriously undefined, and Richard Craswell shows nicely that it cannot be defined merely by reference to a mental state.²⁶ Instead, the analysis here suggests that willful breach is not a characteristic of the action but a legal conclusion. It is a tag attached to behaviors that reveal information about some underlying systematic pattern, distinct from the breach itself.

In the numerical example, as in the real world, the super-compensatory increment of damages depends on the detection likelihood and the harm from undetected breach. It is not plausible that courts would know this likelihood and the undetected harm. This analysis, therefore, does not provide a neat formula to help courts assess the magnitude of excess damages. Still, even if hard to implement with mathematical precision, the analysis provides an understanding of the factors that ought to be considered when damages are assessed. We demonstrate below, in the doctrinal section, how this is done in practice.

Thus, what emerges from applying the model to the willful breach context is the insight that willful breach is punished more heavily not for its own harm, but for the mesh of systematically related behaviors that are undesirable and reduce the overall surplus, but go undetected. These behaviors are noncontractible—they represent deviation from the “spirit” of the obligation, what the model identified as the difference between Mediocre and Standard quality—and therefore non-sanctionable. The way they can be influenced is not by direct monitoring and deterrence, but rather by changing the ex-ante incentive to engage in them and influencing the promisor to become a High-investment/high-integrity type.

The idea that some breaches are only the “tip of the iceberg” and are linked to additional undetected infractions invokes two alternative accounts of linkage. One account, which we do not develop here but which can have some purchase in the criminal law punishment of intent, is that the wrongdoer’s actions are all linked through his “character.”²⁷ It is his underlying bad personality, or behavioral predisposition, that renders this party more likely to commit a whole slew of undesirable acts. When one act is observed, a character linkage is then relied on to infer other acts and to justify a harsher punishment.

26. See Craswell, *supra* note 6, at ___.

27. See, e.g., Russel Dean Covey, *Exorcizing Wechsler’s Ghost: The Influence of the Model Penal Code on Death Penalty Sentencing Jurisprudence*, 31 *Hastings Const. L.Q.* 189, 235 (2004) (noting that under the character theory of punishment, “the purpose of retribution is not to proportion the punishment to the evil of the act, but rather to proportion the punishment to the evil of the character to whom the act is attributed”); Samuel H. Pillsbury, *The Meaning of Deserved Punishment: An Essay on Choice, Character, and Responsibility*, 67 *Ind. L.J.* 719, 733 (1992) (“[Character] theory rests on the idea that in punishing we judge not only the action but also the person revealed by the action.”).

An alternative account, which is the one invoked here, is that the wrongdoer's actions are all linked, not through a behavioral linkage, but through a "technological" linkage. The wrongdoer's miscellaneous acts are part of a unifying pattern because of an ex ante choice he made, which subsequently rendered many types of breach more beneficial to him and thus more likely. Our focus on such technological linkages also helps us narrow the scope of the application of the theory. Willful actors are punished for other types of probabilistic conduct within this relationship, against the same aggrieved party. They are not punished for being nasty per se, or for being bad citizens.

C. The Efficiency of Super-Compensatory Damages

This model provides a different account of efficient damages than the standard "efficient breach" paradigm. The standard paradigm requires damages to equal the lost value from breach, or else efficient breach would be deterred.²⁸ In the model here, this form of ex-post allocative efficiency can indeed be compromised, because the promisor might prefer to perform even at a high cost rather than breach and pay the super-compensatory damages.

This effect was absent in the numeric example studied above, since Terrible performance was never chosen when the ex ante investment was high and the optimal super-compensatory damages were never high enough to induce inefficient performance when the ex ante investment was low. In real situations, super-compensatory damages can lead to inefficient performance both when ex ante investment is low and when ex ante investment is high.

In these situations the two efficiency perspectives seemingly collide: super-compensatory damages are good because they improve the ex-ante investment and they are bad because they deter efficient breach. Still, it is a standard view that the latter problem (but not the former) can be easily overcome by renegotiation. That is, if a contingency arises in which it is efficient to breach but too costly because of high damages, the parties can agree to release the promisor from its obligation.²⁹ It is in the interest of both parties to find a mutually agreeable price to make this release possible. This private solution cannot solve the ex-ante under-investment problem, because by virtue of its pre-contractual timing, it is not contractible.

D. From Moral Hazard to Adverse Selection

The model developed in Section A is a moral hazard model. The promisor chose an inadequate level of unobservable ex ante investment. The goal was to induce the promisor to choose the efficient level of investment. We showed that when an inefficiently low investment leads to both sanctionable and non-sanctionable breaches, imposing super-compensatory damages on the sanctionable breaches can

28. See Posner, *supra* note 3, at 118–122.

29. See *Walgreen Co. v. Sara Creek Prop. Co.*, 966 F.2d 273 (7th Cir. 1992); William P. Rogerson, *Efficient Reliance and Damage Measures for Breach of Contract*, 15 *Rand. J. Econ.* 39 (1984).

compensate for the inability to impose damages on the non-sanctionable breaches, thus inducing efficient ex ante investment. In other words, sanctioning one breach can substitute for the inability to sanction another breach, due to the common ex ante investment which creates a “technological” linkage between the sanctionable and non-sanctionable breaches.

While our focus is on this moral hazard model and the technological linkage that it assumes, we briefly discuss the alternative, adverse selection model that provides a similar rationale for increased sanction by assuming a character linkage between the sanctionable and non-sanctionable breaches. In the adverse selection model, there is no ex ante choice of investment level. Rather there are two types of promisors, a low-integrity type and a high-integrity type. Each promisor’s inherent integrity is determined by “nature” and is not a result of failure to invest properly. Individuals’ integrity types are unobservable. According to one interpretation, integrity can be thought of as a non-monetary fairness cost that the promisor bears when he tenders low-quality performance. A high-integrity promisor bears a high fairness cost, and thus will provide high-quality performance even when the breach is expected to be non-sanctionable. The low-integrity promisor, on the other hand, bears a low fairness cost and thus might shade and provide low-quality performance when breach is non-sanctionable.

The imperfect detection theory explains how super-compensatory damages can be used to align the incentives of the low-integrity promisor. When detection is stochastic, the low-integrity promisor will face an expected sanction equal to the probability of detection multiplied by the damages amount. If only compensatory damages are assessed for detected breaches, the ex ante expected sanction will be too low to deter all inefficient breaches. Super-compensatory damages increase the expected sanction and improve efficiency. They compensate for those breaches that go undetected. When low-integrity underlies a detected breach of contract, it is fair to assume that other, undetected breaches were committed. The detected breach reveals information about the promisor’s type, and it is this information that justifies the increased damages award.

The adverse selection model differs from the moral hazard model in important ways. The moral hazard model justifies the imposition of super-compensatory damages even when it is known that the breach will be punished with a probability of 100%; the super-compensatory damages substitute for the inability to punish other non-sanctionable breaches. In the adverse selection model, in contrast, super-compensatory damages are more difficult to justify when one breach is sanctionable and the other is non-sanctionable. This strategy would only reinforce the low-integrity promisor’s incentive to avoid sanctionable acts; it would do nothing to deter the non-sanctionable acts. Thus, such super-compensatory damages cannot be justified on deterrence grounds. They could be justified, though, on retributive grounds: the promisor deserves to be punished because of his revealed low-integrity character. This

account might resonate in the context of criminal punishment.³⁰ But it is hard to justify in a contract law setting. The promisee will refuse to pay a higher price for super-compensatory damages that provide no deterrence benefit (and, in fact, entail a deterrence cost). And if the lawmakers attempt to follow a retribution theory and set a high damages default rule, parties would opt out of this default.

II. Willful Breach Doctrine

In this Section we go through several possible applications of the willful breach doctrine and examine whether they are consistent with the theoretical model developed in Part I.

A. *Over-Compensatory Expectation Damages*

Even without looking to tort law, courts sometimes award over-compensatory expectation damages. In theory, over-compensatory expectation damages are an oxymoron. In practice, contract doctrine allows much flexibility in measuring expectation damages, and courts choose higher measures when they consider the breach willful or in bad faith. These questions arise most often in construction contracts and other service contracts, when the court is required to choose between the lower, diminution-in-market-value measure of the defective service and a higher measure based on the cost of completing the performance (or repairing a non-complying performance).

In Jacob & Youngs, Inc. v. Kent,³¹ the builder used a different brand of pipe than what the contract specified. The installed pipes were equally good, hence no diminution in value, and it would have been prohibitively costly to fix the non-conformity and replace the pipes. Judge Cardozo, in the passage quoted in the Introduction,³² emphasized the role of willfulness. Since the non-conformity was considered unintentional, the lower measure of damages applied. Otherwise, had it been deliberate, the contractor would have been liable for the full cost of repair. Many courts follow this heuristic.³³

Our information theory can rationalize this doctrine. Construction contracts usually contain detailed specifications of multiple performance dimensions. When the contractor deliberately breaches one specification, it becomes more likely (as a matter of statistical inference about past behavior) that the contractor had an underlying “propensity” or policy to chisel. This does not have to be an outright policy of active search for opportunities to “save” (as was State Farm’s PP&R policy). It can also be the product of a general lack of attention to contractual terms or a general laxity in quality control—what we modeled as a low ex ante investment. This ex-ante choice of a general inadequate adherence to quality may well

30. See, e.g., Peter Arenella, Character, Choice and Moral Agency: The Relevance of Character to our Moral Culpability Judgments, *Soc. Phil. & Pol’y*, Spring 1990, at 59; supra note 27 and accompanying text.

31. See Jacob & Youngs, Inc. v. Kent, 129 N.E. 889, 890 (N.Y. 1921).

32. See supra text accompanying note 7.

33. See Marschall, supra note 5.

have resulted in many other undetected deviations. It is this underlying choice that is being (indirectly) scrutinized by the damage measure.

Of course, it may sometimes be difficult to ascertain whether an act is intentional and part of a pattern. The dissent in Jacob & Youngs differed with Judge Cardozo on this issue, arguing that the contractor's choice to install the wrong pipes was deliberate and should be subject to the super-compensatory measure of damages.³⁴ The information theory developed here provides a theoretical basis for choosing between the different conceptions of willfulness and bad faith by directing the court to consider whether the conduct in question is part of a hard-to-detect pattern.

The question in Jacob & Youngs and similar cases is commonly framed as a question of measurement: how should the owner's expectation interest be measured? This framing presumes that damages should be compensatory and proceeds to ask what measure of damages achieves the compensatory goal. Our analysis breaks with this tradition. It recognizes that cost-of-completion damages may well be over-compensatory, and provides a justification for this deviation from the compensation principle.

Our analysis also differs from the standard law-and-economics account of the cost-of-completion measure, an account that focuses on ex-post efficiency. This standard account is primarily concerned with the over-deterrence effect of super-compensatory damages.³⁵ Under our analysis, the perspective is on the "ex ante" pattern of conduct that willful breach is part of. From this perspective, extra damages provide a necessary incentive. And as suggested in Section I.C above, the possible over-deterrence of efficient breach can be resolved through ex-post bargaining.³⁶

The imperfect detection theory supports higher, cost-of-completion damages in construction cases, where insufficient ex ante investment can lead to multiple undetected breaches. The theory cannot justify high damages in other cases where the courts struggle with identifying the appropriate measure of expectation damages. For example, in several mining cases courts were required to assess damages for the mining company's failure to restore the land as specified in the contract with the land owner.³⁷ Unlike the construction contracts discussed above, in which the builder is under countless obligations, these mining contracts commonly impose only two easily verifiable obligations on the mining company—to pay the land owners royalties for mining their land and to restore the land after the mining operations are complete. Here, undetected breaches are unlikely, and so the imperfect detection theory cannot justify super-compensatory damages.

34. See Jacob & Youngs, 129 N.E. at 892.

35. See, e.g., Posner, *supra* note 3, at 121.

36. See, e.g., Richard Craswell, Contract Remedies, Renegotiation, and the Theory of efficient Breach, 61 **S. Cal. L. Rev.** 629 (1988).

37. See, e.g., Groves v. John Wunder Co., 286 N.W. 235 (Minn. 1939); Peevyhouse v. Garland Coal & Mining Co., 382 P.2d 109 (Okla. 1962).

B. Tort Damages for Bad-Faith Breach

Traditional contract damages are intended to be compensatory, but in certain contexts a breached-against party can recover damages that go beyond redress of the compensatory interest. One of the most prominent examples is the tort remedy for bad faith breach of an insurance contract by the insurer. An insured can recover more than contract damages, including punitive damages, if the insurer denied benefits intentionally, knowing that there was no reasonable basis for the denial.³⁸ In the United States, this is considered a tort remedy, but only in order to overcome the no-punitive-damages rule of contract law. Stripped of its doctrinal clothing, it is essentially a specific remedy for willful breach of the insurance contract (and some other select species of contracts).³⁹

Often, this doctrine is justified on the basis of increased harm (e.g., emotional distress to an aggrieved insured, increased secondary harm from delay, or attorney's fees). But it is striking that in justifying the infliction of punitive damages, courts often make reference to the insurer's systematic and hard-to-detect pattern of deviations from the spirit of its obligation, which went beyond the specific denial at issue. In the leading case Campbell v. State Farm Mutual Automobile Insurance Co., State Farm Insurance argued that its breach (the denial of benefits) was a singled-out "honest mistake," but the Utah Supreme Court found that it was part of a national scheme intended to pay claimants less than what their policies entitled them—a pattern of "trickery and deceit."⁴⁰ Because this systematic conduct "would evade detection in many instances" it should be more heavily sanctioned "on those few occasions where it was discovered."⁴¹ Put differently, State Farm had to pay more than compensatory damages because it chose a low-value, low-integrity, policy. It even gave it a name: "Performance, Planning, and Review," or PP & R policy.⁴² Many manifestations of this policy were unobservable. To deter insurers from engaging in such low-integrity policies, a punitive component was added to the damage measure.

Interestingly, when the Campbell case came before the U.S. Supreme Court, the Court ordered to reduce significantly the punitive damages, from a multiplier of 145 to a multiplier not exceeding a single-digit. In doing so, the Supreme Court rejected the pattern-of-systematic-bad-behavior justification: "The [Utah] courts awarded punitive damages to punish and deter conduct that bore no relation to the Campbells' harm. A defendant's dissimilar acts, independent from the acts upon which liability was premised, may not serve as the basis for punitive damages."⁴³ Despite this specific rejection of the

38. See, e.g., Anderson v. Cont'l Ins. Co., 271 N.W.2d 368 (Wis. 1978).

39. See **Joseph M. Perillo**, 11 **Corbin on Contracts: Damages** § 59.2 (rev. ed. 2005) (explaining the classification into tort law is meant to serve the purpose of increasing damages).

40. Campbell v. State Farm Mut. Auto. Ins. Co., 65 P.3d 1134, 1147–57 (Utah 2001), rev'd, 538 U.S. 408 (2003).

41. Id. at 1151 (quoting Crookston v. Fire Ins. Exch., 860 P.2d 937, 941 (Utah 1993)).

42. Id. at 1143.

43. State Farm Mut. Auto. Ins. Co. v. Campbell, 538 U.S. 408, 422–23 (2003) (emphasis added).

“pattern” theory, the theory pervades through much of the insurance law damages doctrine and provides justification for increased damages.

Note that in other contexts the problem of undetected breach can be solved without punitive damages. When a phone company or a credit card company charge their customers excessive fees beyond what is contractually allowed, many customers will not detect the breach. But the uniformity of conduct across cases makes these violations eligible to be pursued by class representatives, through class actions. In the insurance context, by contrast, undetected violations and harms differ across cases and depend on context, thus cannot be redressed in the aggregate and need to be subject to punitive damages. There are a few other contexts in which this rationale applies, and in which courts agree to levy exemplary damages.⁴⁴

The tort damages for bad faith breach cases demonstrate that the information-based theory can support a mandatory, non-disclaimable, rule of super-compensatory damages. Until now, the argument supported super-compensatory damages only when the parties would have stipulated such increased damages in a complete contract. That is, it was an argument for a default rule. But when the pattern of breaches cuts across contracts, increased damages in one contract can deter the pattern and thus generate a positive externality on other contracts. And there is no reason why one promisee would want to pay the higher price that increased damages entail, if she reaps only a small portion of the deterrence benefits that these high damages create. Put differently, each promisee would want to stipulate low damages in her contract and to free-ride on the high damages in other contracts without paying a higher contract price. In equilibrium all promisees will opt-out of the high damages default, resulting in a Pareto inferior outcome. In the presence of such externalities, the default rule justification for supra-compensatory damages no longer holds, and supra-compensatory damages can only be sustained as an immutable rule. Here again the invocation of tort principles proves handy.

C. Restitution

In some circumstances, the law enables the aggrieved party to recover in restitution in lieu of expectation damages, even if this remedy is compensatory.⁴⁵ High restitution awards are traditionally rationalized as necessary to prevent unjust enrichment from an intentional breach. In some cases, they can also be justified under our information theory.

For example, after signing a detailed contract the promisor deviates from the contractual specifications in a way that reduces the cost of performance without affecting the market value of the performance to the promisee. According to the proposed Restatement (Third) of Restitution, the promisee is entitled to recover the reduction in performance costs.⁴⁶ This rule can be justified under the information

44. For exemplary damages in banking and employment cases, see **Perillo**, *supra* note 39, at 386–87.

45. **Restatement (Second) of Contracts** § 345 (1981); **Restatement (Third) of Restitution and Unjust Enrichment** § 39 (Tentative Draft No. 4, 2005).

46. **Restatement (Third) of Restitution and Unjust Enrichment** § 39, illus. 7, 9.

theory if the detected deviation, which did not harm the promisee, was likely accompanied by additional undetected deviations that did harm the promisee.⁴⁷

The information theory stops short, however, of justifying a wholesale extension of the disgorgement remedy to any profitable breach. Many of the applications of this remedy proposed in the Restatement (Third) of Restitution § 39 involve single breach incidents that do not necessarily correlate with a pattern of rent-seeking behavior. If a tenant breaches the lease and sublets the apartment without the landlord's consent or if a buyer breaches a sale contract and resells the goods in competition with the seller,⁴⁸ these are scenarios in which the breaching party acted against its sole post-payment obligation. These parties may be engaging in efficient substitution, which the disgorgement remedy could inefficiently discourage. Within our theory, it is hard to see how such isolated breach acts, however severe, point to patterns of undetected misconduct that would justify the super-compensatory remedy.

Conclusion

There are two striking aspects to the law of willful breach. The first is the pervasive sense that willful breach is worse, and deserving of greater sanction, than inadvertent breach. The second is the difficulty in defining willful breach, given the fact that most breaches are a result of some voluntary decision by the promisor but not all are abusive. The thesis developed in this paper tries to clarify both aspects. It suggests that the definition of willful breach lies not in some intrinsic characterization of the mental state of the promisor. Rather, willful breach is the tag attached to behaviors that reveal information about some underlying bad trait, distinct from the breach itself. What makes a trait bad is the fact that it is associated with a pattern of undetected value-skimming conduct. Thus, willful breach in our theory is a device that encapsulates information. It is this information that justifies the harsher remedial consequence.

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47. The proposed rule would also apply to cases of unintentional breach. *See id.* at illus. 14. This can be justified if the breach, while unintentional *ex post*, is the product of intentionally low *ex ante* investments in quality control, which could generate multiple undetected breaches.

48. *Id.* at illus. 8, 10.

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