

UNCONSCIONABILITY AND IMPERFECT INFORMATION: A RESEARCH AGENDA

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Many consumer protection initiatives were enacted or adopted by courts and legislatures in the United States during the 1960s and 1970s. The first major intervention, in 1960, was the *Henningsen* case,¹ which held the standard automobile warranty unconscionable; probably the last was the Federal Trade Commission's rule, in 1982, that prohibited the taking of security interests in household goods, except for purchase money security.² In between were the Truth in Lending Law, The Magnuson Moss Warranty Federal Trade Commission Act, the Uniform Consumer Credit Code, and additional statutes and cases. Much of this law preceded serious scholarly commentary. For example, in the Senate debates in 1967 on the Truth in Lending Law, the Bill's major sponsor, Senator Douglas, asserted that if 10% of the consumers in a market shopped for credit, these "price conscious" consumers would force firms to price competitively.³ At that time, no equilibrium model of price search existed: not only was there no scholarly support for Senator Douglas's 10% figure, there was no method by which to answer the question of how much consumer search is necessary to ensure competitive pricing.

Consumer protection scholars produced a large amount of literature in the period between the mid-1960s and the mid-1980s. As the legislatures and courts became passive, the scholars lost interest. With the exception of the products liability and medical malpractice fields, where courts and legislatures continue to innovate, little scholarship is being produced. Two decades of

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¹ 32 N.J. 358, 161 A. 2d 69 (1960).

² 16 C.F.R. Part 444, §444.2(a)(4).

³ Quoted in National Comm. on Consumer Finance, *Consumer Credit in the United States* (1972), p. 176.

consumer protection literature resolved some important issues but left much unsettled. Since the urge to regulate is stronger than the sex drive, it is prudent to suppose that the consumer protection movement will rise once more. Even tentative answers to the questions that decision-makers then will ask are preferable to the past practice of regarding existing statutes as topics for future research. So I set out, in regrettably summary fashion, what seems settled respecting unconscionability and imperfect information and what remains in dispute.

1. Progress with Unconscionability

Arthur Leff observed in 1967 that courts were applying a two-part test in unconscionability cases. A contract clause would be held unconscionable if it was both procedurally and substantively defective. A procedural defect exists when the contracting process was unlikely to yield terms that consumers would freely choose; a substantive defect exists when a term is “unreasonable”, “unbalanced”, “extreme” according to the standards of the time and place.⁴ Leff later observed that the focus on procedural defects was odd. Courts were asked to evaluate the contracting process, but there seldom was a contracting process; rather, contracts came to consumers much as products did — as “things” that could be bought or rejected but not changed.⁵

These observations led to the insight that courts should focus less on the relationship between the individual consumer and the individual firm, and more on the market in which the contract was made.⁶ Product markets work well when firms produce the goods that people want, and sell them at competitive prices. If a consumer contract is like a product, then the relevant question is whether the contract is sold in a competitive market. The social optimum exists when firms use contract terms that people want, by and large, and price these terms competitively.

This conclusion implies that unconscionability is not a private law specialty but rather a branch of the law whose task is to ensure

⁴ Leff, “Unconscionability and the Code — The Emperor’s New Clause” (1967), 115 U. Pa. L. Rev. 485.

⁵ Leff, “Contract as Thing” (1970), 19 Am. U.L. Rev. 131.

⁶ An early recognition of this point is Schwartz, “A Reexamination of Nonsubstantive Unconscionability” (1977), 63 Va. L. Rev. 1053. See also Eisenberg, “Unconscionability and the Bargain Principle” (1982), 95 Harv. L. Rev. 741.

that markets function competitively. The issue is what market imperfections could cause firms to sell noncompetitive contracts. Two such imperfections arguably are germane: the existence of imperfect information and the existence of structural monopoly power.⁷ These imperfections also flaw markets for products and services. Decision-makers therefore can draw on the institutional and substantive wisdom that underlies the antimonopoly laws when evaluating consumer contracts. Put more vividly, unconscionability is antitrust.

Two important results follow from recognizing that the unconscionability doctrine should function to ensure that markets for contract terms are competitive. These results have been insufficiently appreciated because hardly anyone is paying attention. The first result illuminates the relation between procedural and substantive unconscionability. The second result concerns the institutional implications of recognizing that unconscionability law should be a part of the larger law of market failure.

(1) The Relationship Between Procedural and Substantive Unconscionability

It is helpful to begin with two distinctions. The first is between the price term and all other terms. The second is among the categories of imperfect information. This second distinction requires elaboration. Three forms of imperfect information are relevant to regulation. Imperfect information exists when: (1) the consumer is ignorant of the legal relationship that the contract creates. For example, the contract provides that the creditor can repossess the debtor's property upon default, but the debtor does not know this because the contract is written in fine print and arcane legal language; (2) search costs prevent markets from reaching competitive outcomes. Firms could sell a homogeneous product at different prices only if consumers would not comparison shop. High search costs reduce comparison shopping; (3) consumers cannot evaluate the risks that contract clauses allocate. For example, a disclaimer shifts the risk of product defects to consumers. Markets will function poorly if consumers cannot evaluate this risk.

A finding of procedural unconscionability implies a finding that the price term is substantively unconscionable. Monopoly prices

⁷ Such power exists when a market has one or a few sellers.

are inefficient. Hence, a showing that the seller has structural monopoly power implies a finding that market prices are too high. A showing that too few consumers comparison shop to generate competitive prices — *i.e.*, search costs are too high — also implies a showing that market prices are inefficient. Finally, if consumers are unaware of the price term, sellers will raise prices above competitive levels. Hence, when prices are concealed or quoted in forms too complex for ordinary persons to understand, prices once more will be too high.

Matters are more complex when non-price terms are at issue. Consider structural market power first. A seller with market power can exercise this power through the price term or through the non-price terms. Such sellers will exercise their power only through price when consumers have decided preferences for particular non-price terms and these are not excessively costly to supply. This is because a monopolist does better selling what consumers want at high prices rather than selling what consumers do not want at high prices.⁸ When consumers can read the contract and understand the relevant risks, courts ordinarily assume that the terms reflect consumer preferences. This presumption of conscionability should be accorded to a monopolist's contracts also.

Matters are otherwise when the consumer cannot read the contract or evaluate the risks that the contract shifts to her. In these cases, sellers have an incentive to degrade the quality of the non-price terms. Thus when the contract is unreadable or consumers estimate risks incorrectly, the non-price terms should be considered presumptively undesirable.

(2) Institutional Implications of Unconscionability

The second result holds that the unconscionability doctrine not only is a branch of the antimonopoly laws but should dissolve into them. This conclusion has the institutional implication that legislatures and administrative agencies should be primarily responsible for ensuring that markets for contract terms work well. The procedural question that an unconscionability case poses is whether the market in which the contract was made was imperfect. Courts do attempt to answer market imperfection questions in antitrust cases, though seldom to anyone's satisfaction. They do worse in

⁸ A model that generates this conclusion is set out in the Appendix, *infra*.

consumer protection cases. So little money is at stake in these cases, relative to the usual antitrust case, that the parties seldom provide courts with the facts to answer such questions as whether a firm has enough market power and the incentive to degrade the quality of a consumer contract. More seriously, courts lack the remedial power to resolve unconscionability issues. A court can enforce a contract clause or ban it. Suppose a contract is flawed because there is imperfect information. Often the best remedy is a plain-language law, to make the contract readable, or a disclosure scheme, whereby consumers are given the information requisite to making a rational decision. Courts cannot create and police disclosure schemes. Hence, the unconscionability doctrine, properly understood, should function as a directive to legislatures and administrative agencies, not to courts. The judges generally should enforce what the contract says; the legislatures should respond to the market imperfections that generate flawed consumer contracts. This analysis leaves open the question just what the legislatures and agencies should do.

2. Issues In Costly Search

There are three questions respecting costly search: (1) How do search costs affect prices? (2) How do search costs affect contract terms? (3) How should the state remedy market imperfections attributable to costly search? I begin with prices.

(1) Costly Search and Prices

High search costs permit firms to charge supracompetitive prices. If a homogeneous product such as bleach sells at four prices, three of those prices are too high. This analysis teaches two lessons. First, when substantial price dispersion exists, a market is performing poorly. Second, the cause is high search costs: were consumers to shop extensively, the high price firms would be forced to lower their prices or exit; but search costs prevent consumers from shopping extensively.⁹

⁹ Price dispersion has been attributed to the existence of high search costs since Stigler's famous article. See "The Economics of Information" (1961), 69 *J. Political Econ.* 213. For a recent survey, see Burdette, *Search Market Models: A Survey*, Discussion Paper #354, Department of Economics, University of Sussex (1990). A Canadian example of the phenomenon is illustrated in Dahlby and West, "Price Dispersion in an Automobile Insurance Market" (1986), 94 *J. Political Econ.* 418.

This is well understood but a problem remains. The problem is how to know when a product is homogeneous. While different prices for the same product signal market malfunction, different prices for different products do not. Thus the state must be able to decide what the same product is. This can be difficult. For example, a stereo sold in a downtown department store costs more than the same stereo sold at a discount mall. Does a policy problem exist? If a store with a liberal return policy charges higher prices than a store that treats sales as final, should the state be concerned? There is a question just how decision-makers should condition on the existence of price dispersion when product homogeneity is difficult to assess.

A second unresolved issue concerns the effect of reputation. Search analysts usually model a static world. In that world, firms will not compete on price when consumers will not shop. Hence, high prices can exist in equilibrium. Reputation becomes relevant in a dynamic analysis. For example, a firm may be able to increase profits by pricing low to earn a reputation as a low price store. When search costs are high, consumers will shop little, but that little may include a visit to the store with a reputation for charging low prices. Hence, a store can overcome losses attributable to low prices and low volume in early periods with high demand in later periods. This reputation effect has been demonstrated experimentally,¹⁰ but reputation has not been formally studied.

As examples of what is unknown, will firms that develop reputations later run these reputations down over time by charging high prices to consumers who become habituated to visiting them routinely? Put more abstractly, what is the optimal time frame for a reputation? Does advertising make reputations easier to acquire or does advertising create barriers to entry by low cost sellers? Decision-makers could respond better to high market prices caused by costly search if the scholars had more to say about product homogeneity and reputation.

(2) Costly Search and Terms

Respecting contract terms, markets will function competitively if enough consumers comparison shop: firms will supply consumers with the contract terms that the consumers prefer at

¹⁰ Grether, Schwartz and Wilde, *Price, Quality, and Timing of Moves in Markets with Incomplete Information: An Experimental Analysis* (mimeo, 1991).

prices that equal cost. If too few consumers shop, firms may exploit consumers by charging high prices for the contract terms that consumers want or by degrading the quality of the contract (or both). If firms commonly exploit through price, then the standard unconscionability remedy of non-enforcement is misconceived. Courts should not ban contract terms that consumers want. Whether a firm will exploit through price or not is partly a function of the same two factors discussed above in connection with the analysis of structural monopoly power, the consumers' willingness to pay for desired terms and the costs of supplying them. When consumers will pay for terms they want, such as broad warranty coverage, firms will supply these terms unless the terms are unduly costly.¹¹ The third factor that determines the firm's strategy is the extent of search: consumers must shop very little for a market to ignore consumer preferences altogether.

The unresolved difficulty is that the willingness to pay and cost variables are difficult for decision-makers to observe. The theory cannot be made operative unless criteria are developed by which to know when and when not contract terms are responsive to consumer preferences. The willingness to pay variable is especially troublesome. When public agencies do cost benefit analysis respecting public projects, they sometimes ascertain the citizens' willingness to pay with surveys. This technique may suffer from response bias, but still it is better than guessing. There is a question whether decision-makers would often have to guess respecting the willingness to pay for contract terms, because there are so many terms that too few surveys could be conducted. Transmuting the insights of search theory respecting contract terms into implementable rules is a problem in applied public policy that is only partly solved.

(3) Remedies

Remedy issues also could be better understood. There initially is a question whether price dispersion in markets is self-correcting. Let two firms exist: one charges \$100 per item and the other charges \$40. Then there is a profit to be made by someone who can tell consumers where to find the low price firm at a charge that is below \$60. Will informational intermediaries emerge "naturally"

¹¹ See Schwartz and Wilde, "Imperfect Information in Markets for Contract Terms: The Examples of Warranties and Security Interests" (1983), 69 Va. L. Rev. 1387.

to shrink price dispersion? Some do exist, such as cable television stations that transmit comparative price data, but there may be too few. Suppose that a firm does enter the market to tell consumers where the low price sellers are. If consumers buy the informational intermediary's service once, the market will have only one price — \$40 in the example here. But then the intermediary has nothing of value to sell; there no longer is price dispersion to shrink. Will this killed-by-success syndrome cause there to be too few informational intermediaries? If so, the state should be the intermediary. Understanding how informational intermediaries work is an important but unsolved problem in the theory of search.¹²

Important issues of institutional design also require further analysis. For example, should consumers be given price lists for particular markets or an index of frequently purchased items?¹³ How often should comparative price data be updated? What reporting obligations should be placed on firms? Should the central government or local governments play the major role? These questions were asked and forgotten in the late 1970s and early 1980s.

3. Risk Allocation Information

There are three questions, broadly speaking: (1) do people have enough information to make good decisions? (2) will people misprocess the information they have or are given? (3) is effective risk communication possible? I analyze these questions in two contexts, product failure and credit default.

(1) Is There Enough Information?

(a) Product Failure

Two inquiries are relevant. Initially, do consumer risk perceptions correlate correctly with changes in product safety? For example, suppose that a product is defective with probability .05.

¹² When both sides of a market search for good "matches" and when different pairs of contract partners derive different surpluses from a deal, there is a role for intermediaries on a continuing basis. For a recent discussion see Yavas, *The Role of Intermediation in a Search Model*, Department of Economics, Working Paper Series #90-28, College of Business Administration, The University of Iowa (1990).

¹³ Disclosures of comparative price data have been helpful in reducing price dispersion and market prices. See, e.g., Greene, Rouse, Green and Clay, "Behavior Analysis in Consumer Affairs: Retail and Consumer Response to Publicizing Food Price Information" (1984), 17 *J. Applied Behavior Analysis* 3.

The manufacturer then invests in safety and reduces the probability of defects to .03. Consumers may perceive (a) a two percent reduction in the defect risk; or (b) less than a two percent reduction;¹⁴ or (c) greater than a two percent reduction. If consumers underestimate the efficacy of safety improvements, as in case (b), then firms will have an insufficient incentive to improve products. This is because consumers will resist paying the full price for increased safety if they underestimate the extent of the increase. If consumers overestimate, as in case (c), there will be too much safety. Since firms routinely alter products in ways that affect safety, it is important to know whether the effect of these changes is correctly perceived. Nothing is known about this.

The second inquiry is whether consumers correctly perceive the risk level that obtains at a particular time. There are two ways to answer this question. First, the question can be answered directly, by ascertaining actual consumer risk perceptions and seeing how well these correlate with the facts. Second, the question can be answered indirectly, by inquiring whether there is or should be enough information out there to make a rational choice, and whether consumers are good enough information processors to absorb that data. Before considering these approaches, their relevance should be noted. If consumers think products are safer than they actually are, then consumers will buy too many products and have too many accidents. Call such consumers optimists. Does optimism routinely exist?

As regards the direct approach to this question, there is no hard evidence that consumers are optimistic respecting product risk levels. The little evidence there is suggests that consumers are pessimists, believing that products are more dangerous than the products really are.¹⁵ As regards indirect approaches, consumers probably are well informed about the failure risks of frequently purchased products. Infrequently purchased products that pose serious failure risks usually are expensive. Cars and major appliances are illustrations. Consumers engage in extensive search for such items and markets provide considerable information about them. Thus, there may be enough evidence for rational choice.

¹⁴ Such consumers may take the fact of a safety improvement as a signal that the product is very dangerous.

¹⁵ The data are summarized in Schwartz, "Proposals for Products Liability Reform: A Theoretical Synthesis" (1988), 97 *Yale L.J.* 353, at pp. 378-80.

Hence, the conclusion that consumers are sufficiently uninformed about risk levels to justify such doctrines as strict tort liability apparently must rest on the premise that consumers misprocess information.

(b) The Default Risk

Much consumer credit regulation follows from two assumptions. (1) Firms make more money from consumer defaults than from successful transactions. Hence, firms induce consumers to get in over their heads. (2) Consumers routinely overestimate their ability to pay debts; in consequence, consumers get themselves in over their heads. The first assumption is implausible and has been shown to be false.¹⁶ The second assumption is still widely held. This initially seems curious. Consumers default because of illness, job loss, overcommitment on other debts, and other personal factors. An individual debtor is better informed about such factors than is the creditor.

There is a second way to analyze the imperfect information question, however. Suppose that consumers are alike, by and large. Then each consumer wants to know what the odds of default for consumers as a group are. Creditors do not routinely disclose these odds. If consumers underestimate, they may get themselves in over their heads. Whether consumers underestimate is unknown. Thus, either consumers have enough information or no one knows whether consumers have enough information. Given the large amount of regulation that attempts to restrict consumers from obtaining credit, society's ignorance respecting this issue is regrettable.

In sum, many consumer protection initiatives of the 1960s and 1970s were justified on the ground that consumers lacked the information to evaluate the costs of risk allocation terms. Moreover, it was assumed, consumers routinely responded to ignorance by making assumptions that produced bad contracts. Guido Calabresi first asserted that uninformed consumers routinely assumed that products were safe, and so bought too many dangerous products.¹⁷ This remains an assertion. The question how much information is out there deserves more attention.

¹⁶ See Schwartz, "The Enforceability of Security Interests in Consumer Goods" (1983), 26 *J. Law & Econ.* 117.

¹⁷ G. Calabresi, *The Costs of Accidents* (1970).

(2) Do Consumers Process Information Incorrectly?

Legal commentators sometimes refer to the cognitive psychology literature to answer the question whether consumers are well informed. If persons generally make systematic cognitive errors when processing information, then they will be badly informed. Psychologists have observed that people do make systematic cognitive mistakes in experimental contexts. Some legal commentators have inferred from this evidence that people make similar mistakes in markets. This inference is problematic; there is less to cognitive psychology than meets the eye.

To see why, one must first understand the relevance of social science laboratory experiments to life. Returning to the work on costly search, suppose that an economic model predicts that prices will fall as consumer search increases, and that consumer search increases as the cost of search falls. Since search models are mathematical in form, an analyst can assign arbitrary numbers to the relevant variables and predict the outcomes. For example, the analyst can suppose search costs to be zero and show that under that assumption all firms in her model will charge the competitive price. Such models can be tested in the laboratory. Experimental subjects can be made to play the roles of firms and consumers. The experimenter can vary the cost of search and see whether the “consumers” search more or less and whether the “firms” respond to variations in the intensity of consumer search as the model predicts.¹⁸ The laboratory is a real, though simple, economic environment. If a model correctly predicts laboratory results, it is a candidate for explaining real world institutions. The question for a policy analyst is whether factors in the real world would make the model inapplicable, such as the existence of statutes that constrain the actors’ behavior.¹⁹

The psychologists have few models. They know that when they manipulate experimental subjects in certain ways, the subjects perform certain tasks badly. Whether real people perform similar tasks badly outside the laboratory cannot easily be inferred from laboratory performance. This is because without a theory, the analyst cannot know just how “similar” the real world tasks are to

¹⁸ See, *e.g.*, Grether, Schwartz and Wilde, “Uncertainty and Shopping Behavior: An Experimental Analysis” (1988), 55 *Rev. Econ. Stud.* 323.

¹⁹ The theory underlying economic experiments is thoughtfully explained in Smith, “Microeconomic Systems as an Experimental Science” (1982), 72 *Am. Econ. Rev.* 923.

the laboratory world tasks. A theory is necessary to tell if things are similar to each other. Until the psychologists develop more models, their work has limited relevance to policy-makers.

I shall give two examples of these conclusions. Initially, Tom Jackson tried to justify the prohibition on waiving the right to a bankruptcy discharge on the ground that consumers systematically underestimate the risk of default. If they do, then they will waive discharge when to do so would be imprudent.²⁰ Jackson cited the psychology literature's conclusion that people in laboratory experiments underestimate the likelihood of disjoint events. A disjoint event can occur if any of several antecedent causes occur. For example, the consumer will default if she loses her job *or* her child becomes ill *or* her spouse loses his job. A conjoint event can occur only if several antecedent causes *all* occur. For example, the consumer will default if she loses her job, her child becomes ill *and* her spouse loses his job.

The probability that a disjoint event will occur is the *sum* of the probabilities of the antecedent causes because if any one of them happens, the event will happen. The probability that a conjoint event will occur is the *product* of the probabilities of the antecedent causes because all of them must occur. Persons are said to underestimate the probability of disjoint events because they forget to add all the antecedent cause probabilities; rather, they add only causes that have high salience, such as the illness of a child in the illustration above. People allegedly overestimate the likelihood that a conjoint event will occur because they add probabilities rather than multiply them.

According to Jackson, default is a disjoint event. In consequence, consumers underestimate its probability. (If default were conjoint, consumers would overestimate.) Jackson does not give an argument for his conclusion. This apparently is because there is no theory that tells when real world events, rather than laboratory events, are disjoint or conjoint. Casual speculation suggests that people's income is relevant. Much has to go wrong before a middle class person will default on a car loan; for her, default is conjoint. Any reverse may cause a poor person to sink; for him, default is disjoint. Perhaps default is conjoint for the middle class but disjoint for the poor. Thus the state should restrict credit for the poor. But then there is the question at what income level does

²⁰ Jackson, "The Fresh-Start Policy in Bankruptcy Law" (1985), 98 Harv. L. Rev. 1393.

default switch from being a conjoint to being a disjoint event? The psychologists have nothing to say about this; nor does Jackson. Thus this area of cognitive theory does not offer decision-makers much help.

Perhaps another example will be useful. People's inferential judgments are said to be affected by the availability heuristic. A person using this heuristic underestimates the relevance of statistical data in favour of evidence that is easily summoned to mind — that is available.²¹ Since vivid information is easy to recall, people may, as examples, overestimate the odds of winning the lottery if a friend has won it and underestimate the odds of getting cancer from smoking if a grandparent smoked for 85 years and is still healthy. Even if people's judgments are affected by the "availability" of information, it is difficult to justify particular forms of regulation. For example, a person may overestimate the odds of default if a friend just went into bankruptcy and underestimate if he knows only rich people. Then poor people may be excessively cautious about debt because they will know many defaulters, while rich people may over-extend. On the other hand, rich people may recall newspaper stories about particularly poignant defaults and be careful, while poor people may be numbed by knowing so many defaulters and ignore the possibility when borrowing for themselves. Also, if default is disjoint for the poor, causing them to underestimate its probability, but more vivid for the poor, causing them to overestimate its probability, do these errors cancel out? How is one to know? Perhaps criteria for regulation cannot be derived from the availability heuristic.

To summarize, imperfect information exists if people lack data or will process data incorrectly. It is unclear whether and to what extent either information deficit is present in actual markets.

(3) Is Effective Risk Communication Possible?

There is a quantitative and a qualitative aspect to risk communication. Respecting the former aspect, an objection to providing persons with information, rather than regulating the transaction, is that so much information will be required that ordinary people will not be able to absorb it. Respecting the latter aspect, an objection to disclosure legislation is that information about risk is

²¹ See R. Nisbett and L. Ross, *Human Inference: Strategies and Shortcomings of Social Judgment* (1980).

too complex to communicate. The former objection is unsound but the latter objection is troublesome.

(a) Quantitative Aspects of Risk Communication

The objection that people will be unable to absorb additional data respecting risk misconceives the way people make purchase decisions. Several product attributes commonly are relevant to consumer choice. A buyer may be interested in the color, weight, performance characteristics and safety of an appliance. When consumers purchase an item such as a major consumer durable, which is bought infrequently, they commonly use two search strategies. First, they do what is called a conjunctive search. In such a search, the buyer decides which attributes are most important to him and just how much of each attribute the product should have. For example, a buyer may decide not to purchase an item that weighs more than five pounds and lacks a fine-tuning knob. The buyer then screens several products and rejects those that score below his cutoff levels for the attributes that are most important to him. When the buyer has assembled a final choice set, he then compares the items on all salient characteristics; at this stage, a low score on one attribute can be overcome by a high score on another.

The buyer decides what attributes will be relevant at the initial, conjunctive search stage primarily on the basis of personal preference — some buyers care a lot about weight. The cost of observing an attribute also is relevant. The question what attributes to consider at the final stage again is a function of cost and preference, but cost may be more important there because every product in the final choice set satisfies the buyer's most important preferences.

Acquiring and processing information is costly, and these costs rise as the amount of relevant information rises. Consumers do not become confused or make dysfunctional decisions in informationally rich environments. Rather, they modify search strategies. When evaluating an attribute is costly, perhaps because considerable potentially relevant data exists, buyers will tend not to use the attribute at the conjunctive stage, and may not use the attribute at the final stage. Product attributes that are too expensive to observe are irrelevant to choice.²²

²² The analysis in the preceding paragraphs derives from Grether, Schwartz and Wilde,

The state should require disclosure of information about attributes that consumers would want to make salient for choice but cannot, because observation is too costly. Such disclosure cannot be successful unless it reduces the costs of observing the relevant attribute. For example, there may be considerable information in the literature respecting the health attributes of certain foods or food additives. Consumers cannot observe this information because it is too costly for them to read the journals or hire experts to read for them. Concise disclosure on a product label may make the health attribute relevant to consumer choice, because the costs of observing a label are slight.

The relevant question, therefore, is not how much information would the state have to provide. Rather, the question is whether the state can reduce the costs to consumers of observing attributes relevant to rational choice, such as health and safety risks. Good disclosure is cost reducing, not cost increasing. The state often can reduce the cost to consumers of observing relevant product attributes. Much disclosure legislation respecting nutrition and other health risks is of this sort. Whether information relating to the risk of product defects or job hazards can be communicated in a cost reducing form is more difficult. The product defect issue is especially troubling. Workers can be *told* things; consumers must *read* labels or accompanying material. When the message space is so limited and the medium of communication so pallid, conveying risk information is very difficult.

(b) Qualitative Aspects of Risk Communication

This topic is very complex. Therefore, I will only introduce it. There are two major difficulties. First, risk is an inherently complex subject even if one believes that all risk is quantifiable. Many products do not pose an $x\%$ probability of being defective. Rather, these products fail in various ways, that occur with different probabilities and that impose different costs. For example, a new car will be "defective" with very high probability; adjustments or replacements of items are common. It is less likely that the car will be defective in such a way as to create a serious risk to health. Also, minor defects cost less to fix than major defects. Therefore, a car does not pose "a risk" of harm. To

"The Irrelevance of Information Overload: An Analysis of Search and Disclosure" (1986), 59 So. Cal. L. Rev. 277.

inform the consumer adequately of the risk associated with a car, the consumer must be given a density function that relates the differing probabilities of harm to their likely costs.

It would be difficult and expensive for firms to develop density functions. Also, consumers probably could not absorb information in this form. Many consumers will not have heard of a density function or be accustomed to absorbing information set out in a fashion that is congenial primarily to social scientists. Thus there is a question when and how risk information can be communicated in forms that people will be able to understand and that will also be informative. There is considerable discussion in the risk communication literature about this issue but no general agreement.²³

Risk also has a more directly qualitative dimension. Suppose that a product is defective one percent of the time. It can malfunction in either of two ways. In 99.9% of the cases, malfunction requires the buyer to replace a \$10 part; in .01% of the cases, malfunction causes blindness. Let the buyer value the harm of being blinded at \$two million. The monetary sum of the two risks that the product poses is \$20.10. Many people believe that disclosing nothing about the risk of blindness, but rather telling the consumer only that he faces a \$20.10 risk, is insufficiently informative. But if the label warns of the risk of blindness without qualifying words, many consumers either may not purchase — blindness is very scary — or may ignore the more common defect risk. The probability of blindness, however, is only .00001. Given the small message space for communicating product risk information, if firms are required to warn about extremely unlikely but serious risks, consumers may not be told, or may ignore, information about the common risks they face. On the other hand, not to require warnings about qualitatively serious risks is viewed, especially *ex post*, as depriving people of highly relevant information: the claim of a person who is blinded that she should have been warned is appealing. The question how to convey multidimensional information about risk that is accurate yet not misleading requires further research.

Similar complexities attend the giving of instructions. For

²³ See, e.g., National Academy of Sciences, *Improving Risk Communication* (1989); W.K. Viscusi and W.A. Magat, *Learning About Risk: Consumer and Worker Responses to Hazard Information* (1987).

example, is giving instructions respecting the safe use of products effective without also disclosing the consequences of following or ignoring the instructions? Because following instructions is costly, a rational consumer would want to know what the cost buys in the way of risk reduction. Today, firms often are required to give instructions, which is the cost of safety, but are not required to disclose what the degree of risk reduction would be, which is the benefit of safety. Whether communicating information about costs but not about benefits influences consumer behaviour appropriately is uncertain. On the other hand, communicating risk information is difficult. Thus, current wisdom respecting the warning/instruction issue is at an early stage.

To summarize, questions of effective risk communication may be the new frontier for disclosure scholars. Much is known but even more is not known about how to make risk communication effective. It would be helpful to have more answers before major new regulatory initiatives are proposed.

4. Conclusion

Courts traditionally would not enforce contracts that were made under conditions of duress, fraud, imperfect information and the like. The unconscionability doctrine was thought to be an advance, because it made the courts' power explicit and no longer suspect: §2-302 of the UCC tells courts to do what they always had done, but to do it more openly and therefore more effectively. So long as courts were using the unconscionability doctrine to regulate actual contracts, the new wisdom made sense. The Code drafters, however, did not anticipate the mass consumer transaction. Contracts used in this context resemble products more than individualized agreements, and these "contract products" are sold in markets. Thus the question relevant to contract enforcement is whether the markets in which consumer contracts are sold perform well or badly.

Courts are relatively poor social institutions for identifying and remedying market imperfections. Hence, the unconscionability doctrine should seldom be used. Rather, the problems in consumer markets should be approached in a multi-institutional fashion; the questions are what market imperfections exist, how best can they be remedied, and what are the comparative advantages of our various legal institutions? Legal scholars have largely

ignored these questions in recent years. This neglect is troublesome because few good answers to them exist. If the consumer protection movement were to rise again, decision-makers would get insufficient help from us.

APPENDIX

A Monopoly Model²⁴

This Appendix derives the factors that determine the answer to the monopolist's question whether to degrade contract quality or only raise the price, using the product warranty as an illustration. To degrade contract quality is to offer contracts that consumers do not prefer. Assume that the seller is a monopolist and that consumers are alike²⁵ and well informed about product risks.²⁶ A warranty is a promise by the firm to repair or replace defective goods. The firm's customers can prefer warranties or not. The concept of preferring a warranty can be made precise. Let p_w be the maximum price that a typical consumer would pay for the product with a warranty and let p_n be the maximum price that she would pay for the product without a warranty. Then $p_w - p_n$ is the consumer's marginal willingness to pay for warranty coverage. Let c_w be the marginal cost of selling the product with a warranty and c be the marginal cost of selling the product without a warranty. Then $c_w - c$ is the marginal cost of offering a warranty. A consumer prefers a warranty when her marginal willingness to pay for it exceeds the marginal cost of producing it, or when

$$(1) \quad p_w - p_n > c_w - c.$$

A monopolist that agrees to replace defective goods must

²⁴ The model is based on the model in Schwartz and Wilde, *supra*, footnote 11.

²⁵ When consumers have different preferences for product quality — some want faster cars than others — and the firm does not know each consumer's preference, some consumers' preferences respecting the product/contract combination may be unsatisfied. These are the consumers who prefer low quality. Thus, relaxing the assumption above that consumers have homogeneous preferences will not support the conclusion that monopolists will produce low quality products or contracts. See Matthews and Moore, "Monopoly Provision of Quality and Warranties: An Exploration in the Theory of Multi-dimensional Screening" (1987), 55 *Econometrica* 441.

²⁶ The assumption that consumers are well informed about product risks is not made because it is true, but to facilitate the analysis of how monopoly power affects contracts in isolation from the contributions of other procedural defects.

produce more than one item to support each sale (because there is a probability that any sale item will have to be replaced). Let o be the monopolist's profit maximizing output when it sells without warranties and o_w be output when it offers a warranty. Then if α is the probability that the product will be defective, $o_w = (1 - \alpha)o$. The monopolist incurs fixed costs f when it sells without a warranty and fixed costs f_w when it sells with. Since setting up a system to supply warranties is costly, $f_w > f$. Assume for simplicity that the monopolist's marginal costs are constant. Total variable cost if the firm sells with a warranty then is total output times variable cost, or $c \cdot o_w / (1 - \alpha)$. The marginal cost of selling with warranties is total variable cost divided by output: $c_w = c / (1 - \alpha)$. Since $\alpha > 0$, $c_w > c$.

The monopolist will offer warranties when its profit from doing so exceeds its profit from disclaiming. Let π_w be the monopolist's profit from offering a warranty and π be its profit without. Then

$$(2) \quad \pi_w = o_w(p_w - c_w) - f_w.$$

$$(3) \quad \pi = o(p_n - c) - f.$$

The firm will offer a warranty when

$$(4) \quad o_w(p_w - c_w) - f_w > o(p_n - c) - f.$$

Assume that consumers prefer warranties. Then equation (1) implies that $(p_w - c_w) > (p_n - c)$. When the failure probability α is small, as it usually is for products, then o_w is not much larger than o . Therefore, willingness to pay — the magnitude of $p_w - p_n$ — and fixed cost importantly determine whether the firm will offer warranties. When p_w is noticeably larger than p_n and f_w is not much larger than f , the monopolist will make a warranty.

Casual empiricism suggests that the additional fixed costs of setting up a warranty system are small. If this is so, then monopolists will supply warranties when consumers want to pay for them. The same logic applies to other contract terms. Hence, the common conclusion that a firm's contracts should be suspect when it has market power is incorrect.