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THE BASIS OF THE BARGAIN REQUIREMENT: A MARKET AND ECONOMIC BASED ANALYSIS OF EXPRESS WARRANTIES — GETTING WHAT YOU PAY FOR AND PAYING FOR WHAT YOU GET

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TABLE OF CONTENTS

I. Introduction .......................................... 782
II. Market Determination of Terms and Conditions ........ 786
   A. Basic Operation of Markets for Complex Products . 788
   B. Pricing the Complex Product ....................... 791
   C. Warranties as Attributes .......................... 794
   D. Warranties and Insurance Problems ................. 796
   E. Warranties and Buyer’s Inspection .................. 798
   F. Warranties and Search Costs ........................ 800
III. Proposed Test for Express Warranties ................. 800
   A. Terms Offered to the Market ...................... 802
   B. Individually Negotiated Terms — Quasi-Market ... 803
   C. Idiosyncratic Terms — Non-Market ................. 804
IV. Applying the Proposed Express Warranty Test .......... 804
   A. Prepurchase Claims Made to the Market in General .......................... 805
   B. Terms Not Seen Before the Sale .................... 809
      1. Inexpensive or Repeat Purchase Products ...... 810
      2. Expensive or Infrequently Purchased Products . 810
      3. Efficiency and Prepurchase Knowledge .......... 812
   C. Warranties Contained in Express Contracts ........ 813
      1. Standard Form Written Contracts ............... 814
      2. Nonstandard Form Written and Oral Contracts . 816
   D. Buyer Inspection or Use of Expert Opinion ........ 819

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This bell is warranted for twelve months, accidents and improper usage excepted, and unless it shall be rung or struck before it is placed in the belfry, or tolled by pulling or forcing the tongue against the bell by a string or otherwise.¹

Paul Revere

Section 2-313 of the Uniform Commercial Code ("UCC") requires that a seller's affirmation or promise relating to goods being sold must be "part of the basis of the bargain" between the seller and the buyer to constitute an express warranty.² The American Law Institute ("ALI") and National Conference of Commissioners on Uniform State Laws ("NCCUSL") are preparing revisions to Article Two of the UCC and have circulated discussion drafts of section 2-313 which

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¹ Warranty offered by Paul Revere at the Paul Revere House (Boston, Mass.).
² U.C.C. § 2-313(1)(a) (1991). The basis of the bargain requirement also applies to any description of the goods or any sample or model which is claimed to be an express warranty. Id. § 2-313 (1)(b), (c).
abolish the basis of the bargain requirement. The most recent discussion draft provides that any seller affirmation, description or promise made or furnished to a buyer that relates to the goods becomes part of the agreement with the seller and is an express warranty unless the seller proves that a reasonable person in the buyer’s position would conclude that the representation did not become part of the parties’ agreement. The purpose of this Article is to analyze the basis of the bargain requirement and establish an economic basis for deciding when a seller’s affirmation should be considered part of the agreement between the parties and therefore an express warranty. This Article will then analyze the extent to which the most recent discussion draft of section 2-313 circulated by the ALI and NCCUSL conforms to the criteria for an express warranty indicated by this economic basis. This Article will demonstrate that the draft of section 2-313 fails to follow an economic based approach and instead inappropriately denies enforcement of seller representations as warranties, particularly to persons who either are unaware of or fail to rely on such affirmations or promises.

The basis of the bargain requirement in section 2-313 has been rather mystifying to both courts and commentators. Section 12 of the Uniform Sales Act, the predecessor of section 2-313 of the UCC, expressly required that a buyer rely on a claim about a product’s attributes for the representation to be an express warranty. Under the
UCC, however, the extent of a buyer's reliance on an affirmation or promise about a good is uncertain. The question of whether the buyer even has to be aware of the seller's representation is uncertain as well. Although some courts have held that a buyer must prove reliance on a seller's affirmation or promise for the representation to be considered an express warranty, others have rejected the requirement. Similarly, although commentators have argued that at least some degree of reliance on a representation about a good must be involved in the basis of the bargain requirement, others have argued for an objective test based either on what the expectations of a reasonable buyer are in purchasing the good or upon the character of the attributes of the product that the seller has promised to sell.

The law's uncertainty about the need for proof of individual reliance in the sale of goods is striking given the decreased emphasis on that requirement for misrepresentation actions involving the sale of securities. To bring a class action for violation of Rule 10b-5 under the Securities Exchange Act, a plurality of the United States Supreme Court has ruled that shareholders who purchase shares in a well-developed securities market can invoke a rebuttable presumption that they relied on misrepresentations to the market and need not prove individual reliance. The ruling was premised on the theory that in a well-developed market the price of the stock reflects all pub-

8. See U.C.C. § 2-313 (1991) (failing to expressly establish any requirements as to a buyer's reliance on a promise about a good or knowledge that any promise about a good was made).

9. Id.

10. For cases establishing that a purchaser must have known of or relied on representation for the representation to constitute an express warranty, see Royal Typewriter Co. v. Xerographic Supplies Corp., 719 F.2d 1092, 1101 (11th Cir. 1983); Overstreet v. Norden Labs., Inc., 669 F.2d 1286, 1291 (6th Cir. 1982); Price Bros. Corp. v. Philadelphia Gear Corp., 649 F.2d 416, 422 (6th Cir. 1981); Speed Fastners, Inc. v. Newsome, 382 F.2d 395, 397 (10th Cir. 1967); GLOBAL TRUCK & EQUIP. CO. v. PALMER MACH. WORKS, INC., 628 F. Supp. 641, 652 (N.D.Miss. 1986); HAGENBUCH v. SNAP-ON TOOLS CORP., 339 F. Supp. 676, 680 (N.D.N.H. 1972); ANDERSON v. HERON ENG'G CO., INC., 604 P.2d 674, 676 (COLO. 1979); STAMM v. WILDER TRAVEL TRAILERS, 358 N.E.2d 382, 385 (ILL. APP. CT. 1976); SCARINGE v. HOLSTEIN, 103 A.D.2D 880, 881 (N. Y. APP. DIV. 1984); WENDT v. BEARDMORE SUBURBAN CHEVROLET, INC., 366 N.W.2d 424, 428 (NEB. 1985).


licly available information, including a misrepresentation. Thus, the information for which the action is brought is imbedded in the price. As this Article will demonstrate, in Part IV, this theory should be equally applicable to sellers' affirmations or other representations in the sale of goods and should result in elimination of the requirement of individual reliance.

In the sale of goods, the question of whether a buyer needs to have relied on or have had knowledge of a representation may arise in a variety of contexts. For example, a purchaser of goods from a catalog may order the goods without seeing a seller's promise or affirmation concerning the goods. Likewise, a purchaser of a product may be unaware at the time of purchase of a seller's express promises or affirmations about the product contained on a card inside the container in which the product is sold. Representations about the goods may be made through advertising or commercials of which the buyer is unaware. Similarly, a seller may make promises or affirmations about a product after the sale or contract for sale has taken place. Finally, a seller may make a representation about his product that a buyer either knows or, through the exercise of reasonable care, should know is false.

16. Id. at 247.
22. Bigelow v. Agway, 506 F.2d 551, 555 (2d Cir. 1974) (concerning a representation by manufacturer's representative that hay could be bailed despite 32% moisture content).
The question is whether under each of the circumstances described above the buyer should be able to enforce the seller's affirmation or promise as an express warranty. To answer this question, it is first necessary to ascertain how express warranties are generated in the marketplace. Secondly, one must ascertain the incentives that the law should provide to sellers and buyers to assure that correct information about product attributes reaches the market to avoid losses caused by erroneous information or promises, as well as to minimize the transaction costs due to search and contracting efforts.

To analyze these issues, this Article will begin, in Part II, by describing a market for complex products. Complex products are those that have multiple attributes for buyers. Products sold with attributes including warranties that offer remedies for failure are complex products. Part III will next present a market-based test to determine when seller representations should be treated as express warranties. In Part IV and Part V, this test is then applied in the contexts of pre- and post-contract representations. This Article concludes that the test suggested improves market efficiency, accords with how markets actually work, and can be applied easily and consistently. Moreover, where an affirmation or promise about a good is false, the test provides the correct incentives for the person with the best access to information about its falsity to correct the representation or disclose its falsity.

II. Market Determination of Terms and Conditions

The reality of today's products (both goods and services) is that they are complex. Products are composed of a multitude of attributes. An attribute is a product feature which buyers value and which

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24. The role of complex products, services, and activities was formalized by Kevin Lancaster in the late 1960s. See generally Lancaster, supra note 23 (discussing theories on consumer behavior). Although Lancaster focused on consumer behavior, Zvi Griliches extended the theory to production, Hedonic Price Indexes for Automobiles, in U.S. Congress, Joint Economic Committee, Government Price Statistics 87th Cong. 1st Sess. (1961), and market pricing. See Zvi Griliches, Price Indexes and Quality Changes (Harvard University Press, Cambridge, MA. 1971). The model has been applied to a wide variety of products and markets: general economic growth and innovation, R & D, Patents, and Productivity (Zvi Griliches ed., 1984); pediatric care, Fred Goldman & Michael Grossman, The Demand for Pediatric Care: A Hedonic Approach, 86 J. Pol. Econ. 259-280 (1978); boilers and turbogenerators, Makoto Ohta, Production Technologies of the U.S. Boiler and Turbogenerator Industries and Hedonic Price Indexes for Their Products: A Cost-Function Approach, 83 J. Pol. Econ. 1-26 (1975); and family life and activities, Gary Becker, A Treatise on the Family (1981). In many ways the most rigorous statement of the model and empirical work can be found in the financial market
is costly to produce. A car's value (and cost) is derived in part from the attributes for transportation, safety, comfort, entertainment, status, and convenience of movement. A house has market value since it protects inhabitants from the elements, provides neighborhood amenities, comes with public services and tax obligations, and offers locational accessibility.

Products have attributes embodied in them only when some buyers value those attributes above the seller's cost of producing the attributes. To the extent that marginal buyers enter the market and demand attribute characteristics, the market will provide those attributes to all buyers of the product. All buyers will receive the attributes,

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25. The importance and analytical usefulness of distinguishing simple from complex economic goods was developed by Lancaster. See Lancaster, supra note 23. He initially defined goods in terms of "characteristics" rather than attributes. With the development of Lancaster's new approach to consumer choice and production, the term "attribute" became more widely accepted. Indeed, the term attribute, characteristic, and quality are used somewhat interchangeably in this context.

26. See generally, Griliches, supra note 24 (discussing characteristics in products which make them valuable to consumers).


28. This Article follows the convention of treating attributes as beneficial (positive) for the consumer and produced by the manufacturer (seller). However, this treatment need not always be the case. Attributes can be negative (costly) to the consumer (buyer); for example, a job may have an unpleasant environment or involve heavy lifting. See Charles Brown, Equalizing Differences in the Labor Market, 94 Q.J. Econ. 113-34 (1980) (discussing the factors individuals weigh in choosing employment). An attribute may be produced by the consumer; for example, child quality and education in the home can be produced by the "consuming" parents. See Arleen Leibowitz, Parental Inputs and Children's Achievement, 12 J. Hum. Resources 242-51 (1977) (analyzing the impact of family backgrounds on economic success). Finally, attributes can be produced by third parties; for example, neighborhood conditions in housing markets can change due to government action or neighbors behavior. See Douglas B. Diamond, Jr. & George S. Tolley, The Economics of Urban Amenities (1982) (stating city housing conditions and their effect on the market).

29. Marginal buyers are those individuals who are indifferent to paying the price for the product or attribute and going without. See Thomas J. Holdych & George Ferrell, Individual Negotiation of Warranty Disclaimers; An Economic Analysis of an Assumedly Market Enhancing Rule, 13 Puget Sound L. Rev. 237, 246 (1990) (Other buyers are already willing to pay the price for the product because the value they expect to get is greater than the price.). Marginal buyers have the strongest incentives (since a small change in the product bundle or price can alter their decisions) to search out alternatives and evaluate terms and conditions. These buyers, also, are the ones who sellers can most easily influence by changing terms and conditions that are advantageous to both buyers and sellers. Marginal buyers are the consumers who cause markets to adjust prices, product bundles, and sales conditions. They discipline the market. Id. at 247.

30. The manner in which sellers determine the preferences of marginal buyers for product attributes is not precisely known, but there are various methods of attempting to make that determination. Sellers can conduct consumer surveys and product trials, but such information is likely to be incomplete and lead to a trial and error process. See Holdych & Ferrell, supra note
even those buyers who do not know of or value the attributes' existence in the product. Home buyers in "better" school districts, for example, pay for this attribute even if they have no school age children. Non-smokers pay for the cigarette lighter in a car, even if they never open the ashtray. The purchaser of a word processing software package pays for the thesaurus, spell-checker, and outlining features, whether he or she knows of or cares to use any of these features. Thus, it is understandable that the market operates differently for products with multiple attributes, and, because of this, a different test should be used for determining whether a seller's representation is an-express warranty.

A. Basic Operation of Markets for Complex Products

The force of our argument for adopting a new test for determining when a seller's representation is an express warranty is based on an understanding of how markets operate for complex products. Therefore, we begin with a preliminary discussion of the operation of private (for profit) markets.

To simplify, a consumer who wishes to purchase a complex product faces two choices. The buyer can determine ex ante all of the attributes desired and then shop for each attribute separately. After purchasing all of the desired attributes, the buyer can then assemble them into a complex product. Alternatively, the buyer can search for a bundle of attributes already assembled by a seller and purchase the product as a whole. For example, a car buyer can shop for and

29, at 244-45 (demonstrating the manner in which sellers determine the wants of buyers). Any seller who fails to satisfy consumer preferences will leave an incentive for other sellers to enter the market to capture the first seller's forgone sales. Id. Ultimately the process is one in which consumers reliably reveal their preferences through purchasing products that have been offered to them. Id. Thus sellers finally have to wait until buyers demonstrate their preferences by making committed purchasing decisions to the product. See Robert E. Smith & William R. Swinyard, Information Response Models: An Integrated Approach, 46 J. MARKETING 81-93 (1982) (maintaining that for many products consumers purchase a product only for trial to determine whether it satisfies their preferences and make a committed decision to the good only after trial).

31. See Mann, supra note 27 (measuring the value change on single family homes in a housing market when school district boundaries were changed).

32. For consideration of the way in which complex products can influence the development of market institutions, see Burton A. Weisbrod, The Nonprofit Economy 16-58 (1988).

33. More complex arrangements than discussed here are possible. For example, buyers may buy partially bundled products and purchase other attributes in after markets to create a preferred bundle. Buyers may self-produce part of the preferred bundle. In some circumstances buyers may unbundle a complex product. However, for purposes of discussion, this simple example is sufficient. More complicated bundling procedures do not alter the basic result described above.
purchase all the component parts for a car—the steering wheel, braking system, engine, air conditioner, etc. After collecting all of the individual parts, the consumer can then assemble them into a car with the desired attribute bundles (including, perhaps, an insurance policy on each of the parts). Alternatively, the buyer can go to a car dealer and purchase all the parts put together (including, perhaps, a warranty). Although most buyers choose the latter approach for automobiles, they do not do so for some other products. For example, stereophonic systems are sold both prepackaged and by component parts. Some people search for the attributes they want and bundle systems together, while others purchase prepackaged systems. Thus, the market accommodates both types of buying behavior.

Sellers of products provide the most profitable shopping opportunities for buyers. The type of product (the bundle) sellers put into the stream of commerce will depend on what buyers are willing to pay relative to the sellers’ costs of production. It will be more profitable for sellers to bundle attributes into complex products rather than sell attributes separately when the seller’s cost of bundling is less than the amount the buyer will pay for the bundled product and less than the buyer’s cost of purchasing and bundling the attribute himself. The seller’s cost of purchasing (or producing) the components and bundling may be less than the buyer’s cost of procuring the attribute components separately and bundling them for two reasons. The seller’s specialization and division of labor may create a comparative advantage in bundling. This production cost advantage is the traditional efficiency reason for firms to emerge in a market system and earn the reward of profit.\textsuperscript{34}

The seller also may exploit non-production cost advantages by reducing the search cost for buyers. When buyers shop for and purchase individual attributes, buyers may incur high transaction costs. These transaction costs include searching for sellers, obtaining price and quality information about the components, traveling to make the purchases, and contracting (explicitly or implicitly) with a multitude of sellers. When a seller bundles the attributes into a complex product, a buyer need only incur one set of these transactions costs. The bundling of attributes into complex products, then, can produce transaction cost savings for the buyers.

Since it can be advantageous for buyers (receiving a product at a lower cost than if they self-produced it) and profitable for sellers (the

amount the buyer will pay is more than the seller's cost of production), markets for complex products emerge. Indeed, a variety of product-type markets will develop responding to the relative costs and benefits for bundling attributes into complex products. Some markets will exist where buyers can purchase attributes separately and produce the bundles themselves, such as markets for stereo components and automobile detailing. Other markets will be for the complex product itself—the stereo component system or the finished automobile. Over time, as the market for computer systems demonstrates, different markets will develop to provide different bundles of attributes to a heterogeneous set of buyers.

Therefore, an important consequence of markets for complex products is the reduction in cost through lower production costs or elimination of some transaction costs, or both. A market for complex products, then, improves the overall efficiency of resource allocation within the economic system by reducing the real cost of producing a unit of output. This improvement in efficiency produces the typical benefits for society: the potential for increased total output, higher real incomes for consumers, and reduced resource cost per unit of output. As with any voluntary exchange, the market for a complex product is a positive sum game which increases the level of welfare for society.

Although the markets for complex products are desirable and enhance efficiency, they introduce or exacerbate the problem of informational asymmetry. Informational asymmetry occurs when one party to a bargain has information that is valuable but unobtainable by the other party. With a complex product the seller generally knows more about the specific attribute bundle and the overall quality of the product than does the buyer, or the cost to the buyer of ascer-

35. See Rosen supra note 34, at 34 (discussing the market for differentiated products).
37. Markets for complex products may not generate the optimal set of outcomes due to the standard problems of market failure. Moreover, special problems related to informational asymmetries may impair the functioning of markets. See infra text accompanying notes 62-63 (discussing the problem of informational asymmetry). However, even if operating at a non-optimal level, these markets will still generate positive net benefits for society.
taining the bundle composition or quality is greater than the value of the complex product. With informational asymmetry, the buyer may become reluctant to purchase the product or may have to expend considerable resources to obtain attribute and quality information. To avoid these buyer responses, the seller can include in the bundle a statement reassuring, with a valuable claim, the buyer about the attributes and the quality level contained therein. This type of statement (an express warranty, for example) acts as a signal to the buyer about the contents and quality of the complex product. The signal itself, then, becomes an attribute in the complex product's bundle. The signal has value to the buyer because it eliminates the need for the buyer to inspect, test, or examine the product completely. In addition, including the signal in the complex product's bundle is profitable for the seller since it allows the seller to convey information to the buyer in a cost-effective manner.

Markets for complex products, then, perform the important function of improving economic efficiency. Both buyers and sellers are in improved circumstances with complex markets. With the seller's assurance, the buyer is no longer reluctant to purchase the product. By cost-effectively assuring the market of its product attributes, the seller makes a profit. To the extent sellers cannot cost-effectively make these "assurance" claims to buyers, the efficiency of markets for complex products will be hindered.

**B. Pricing the Complex Product**

Just as market operation differs for complex and simple products, so does the pricing system. The price of a product depends on the bundle of attributes embodied in the product. The market will establish any product's price so that the subjective value or utility to a willing buyer is equal to or greater than the value of any other alternative bundle (the opportunity cost), whether or not the buyer prefers all the attributes in the bundle purchased. In addition, the value received by the buyer — the price paid by the buyer — is equal to or greater than the cost of bundling the attributes into the product.

39. *Id.*
40. *See id.* at 243 (discussing the effects of consumer information on the seller's profits).
42. The reason that a product is composed of a particular set of attributes may be a function of both production technology and legal constraints. Sellers bundle attributes in the product when it is cost-effective. When the buyer will pay more for the product with the attribute than without and when the increased price is greater than the seller's cost of adding the attribute to the bundle, the seller will provide the attribute as part of the product. When buyers can add the
An understanding that the market price is the payment for all of the attributes embodied in a product is important. Not all attributes will be desired by all consumers; indeed, not all consumers need be aware of all attributes in a product. A consumer purchases a product when the desired bundle of attributes is available at a price below the individual’s subjective valuation. The product purchased may have additional attributes that the buyer is unaware of or does not value. However, the market price will reflect the cost of all the attributes in the product. Buying a product means paying for all the attributes bundled in the product whether or not the buyer knows of their existence or prefers to purchase them.

Because all consumers are not knowledgeable about all attributes does not mean that markets are inefficient and do not create the correct set of attributes for products. As long as the marginal buyers express preferences and search for desired attributes, the market will attribute themselves at a lower cost than the seller can, either due to a comparative cost advantage or because too few of the buyers will pay for the seller’s action, then buyers will purchase the attribute separately (in an after market, for example). In some cases, however, some attributes are costly or impossible to unbundle from other attributes. Thus, auto makers offer passive and non-passive safety restraints as part of an automobile bundle. See generally 49 C.F.R. § 571 (1994) (stating various safety features in automobiles). In additional instances, by public policy, sellers cannot unbundle an attribute from a product. For example, unreasonably dangerous products must be sold with insurance for accidents. See Restatement (Second) of Torts § 402A (1965) (addressing the liability of sellers of products for physical harm to users or consumers). In many cases disclaiming the implied warranty of merchantability is too costly to be feasible. Under the Magnuson-Moss Act, 15 U.S.C. § 2308 (1994), implied warranties of merchantability and fitness cannot be disclaimed if the kinds of express warranties governed by that act are offered. In other cases, when attributes can be purchased separately, specialty markets develop and these attributes are not bundled into the product itself. Thus, detail painting, sunroofs, or special stereo equipment are traded in the after-market for automobiles. Extended warranties and service contracts are offered separately from the product. But, in both cases, whether embodied in the basic product or purchased separately, a buyer pays for the attribute.

43. Purchase and sale can have one of two meanings: 1) trading in an explicit market transaction, the exchange of money (or credit) for an item; or 2) maintaining possession rather than exchanging in the market, the purchase from (or sale to) oneself. If the value of a product changes because of a change in the product’s bundle, the owner (the buyer) can either sell (or the purchaser acquire) the product (type 1 exchange) or the owner can keep the product being a buyer and seller simultaneously (type 2 transaction). By maintaining possession the owner is forgoing the benefits of a sale (the opportunity cost of buying the next best alternative item) and is acting as a buyer. For example, households often act as implicit purchasers for durable goods, especially in housing markets. See Martin Cadwallader, Migration and Residential Mobility (1992) (discussing homeowners as consumers).

44. For example, a consumer of milk may only be interested in purchasing milk that contains 2% fat and does not care that the milk comes with vitamin D fortification. Even though the buyer may not value the vitamin D attribute, the attribute comes with the bundle. Thus, as long as the 2% milk is priced to attract buyers, the existence of additional attributes is not relevant. As the Article notes above, however, the buyer will pay for the additional attributes, even though the attributes may not have entered into the buyer’s decision to purchase. See infra text accompanying notes 30-31.
obtain information about the value of attributes. Producers, searching for profitable opportunities, have an incentive to find that information, or experiment with attributes and bundles that they hope will be valuable to consumers. As this information and experimentation occurs, new bundles, products, and prices will enter the market in response to consumer needs and interests.45

A product's market price is an index reflecting the amounts of all attributes in a particular item. One ball-point pen is priced higher than another because it has more attributes; one house is worth more on the market because its attribute bundle yields more satisfaction than a seemingly "similar" house; the mere prestige of a car will increase its price in the market. Although a product's price measures the value of the attributes embodied in the product, the market reflects the changing demands of consumers and production costs by adjusting either product prices or the attribute bundles in products. During the 1970s and 1980s, for example, American car manufacturers changed the attribute bundles of cars by offering extended warranty terms, more safety, and additional convenience.46 Dry paper copier manufacturers added features for duplexing, color copying, sorting, and collating as well as producing traditional simple copies.47

An absence of reliance or bargaining by a buyer with respect to an attribute does not imply that an attribute is not part of the bundle purchased by the buyer. Rather, it implies that the product has the market determined amount of attributes and that the buyer is paying for these attributes. Of course, buyers desiring special, extra-market terms or attributes will bargain for these items. For example, if a new car buyer wants an extended warranty on a vehicle, he or she will individually negotiate and pay for the warranty.

45. Market imperfections, such as barriers to entry or exit, will reduce the ability of buyers and sellers to adjust and generate new bundles and opportunities. Our discussion here does not consider the impact of such imperfections. To the extent that markets remain contestable, that information is readily obtainable, and that extra-market conditions (licenses, patents, etc.) do not completely frustrate adjustments, competitive adjustments of both bundle attributes and terms will be realized. For the possibility of warranty imperfections, see Michael Spence, Consumer Misperceptions, Product Failure and Product Liability, 44 Rev. Econ. Stud. 561, 572 (1977) (analyzing problematic products and market intervention). For an example of possible legal issues related to informational failure, see Jeff Sovern, Toward a Theory of Warranties in Sales of New Homes: Housing the Implied Warranty Advocates, Law and Economics Mavens, and Consumer Psychologists Under One Roof, 1993 Wis. L. Rev. 13, 103.


47. See Color It User Friendly, Bus. Wk., June 8, 1992, at 64-65 (providing an example of the changes in copier attributes).
Although the idea may appear anomalous to some, it is efficient for some (or even most) buyers not to bargain for or even be aware of all attribute terms, not to perform a detailed inspection of every aspect of a product, and not to inquire explicitly into every attribute. The time and cost of complete inspection and explicit bargaining or reliance would exceed the value of most attributes. The inefficiency of inspection and bargaining is most evident in the case of low-priced, repeat purchase items such as ball point pens. It would not be efficient for a purchaser to disassemble a pen prior to purchase and conduct a metallurgical test of the pen’s spring to determine how well it would function and how long it probably would last.

The same conclusion is true even for more expensive products including consumer durable goods. A purchaser of a nineteen inch color television set would probably not find it cost-effective to have tests conducted on or enter into extensive bargaining with respect to the life and quality of the picture tube to assure that it is marginally better than comparable sets on the market. Requiring consumer knowledge about all attributes, including warranty terms, would be inefficient.

Even if some consumers are unaware of some product attributes, the market price will reflect the cost of producing all attributes in the bundle. To the extent, then, that the bargain agreed to is for all the attributes paid for, unexamined and unknown attributes will be part of the basis of the bargain.

C. Warranties as Attributes

Warranties provide product attributes for a consumer in the same sense that all other characteristics of the product are attributes. In addition to a quality signal, the value of a warranty to a consumer can include the ability to reject or revoke acceptance of a product, ob-

48. See, e.g., Murray, supra note 6, at 322-23 (arguing that failure to enforce seller's representations in manuals because the manuals were not read prior to sale would cause buyers to take the unnecessary precaution of reading all manuals prior to sales).
49. Cost-effective buyer inspection will be efficient and should have an effect on the enforceability of affirmations and promises as warranty terms. See infra part II.E (supporting full disclosure between a buyer and seller) and part IV.2.D (discussing buyer or use of expert opinion).
50. No purpose would be served by devoting resources to bargaining when unbundling a product's attributes is impossible, either for technological reasons or due to legal constraints.
51. That consumers sometimes receive product attributes that they did not explicitly bargain for or even know about is consistent with the implied warranty of merchantability. See U.C.C. § 2-314 (1991) (requiring neither knowledge nor reliance for the implied warranty of merchantability to be valid).
52. See U.C.C. § 2-601 (1991) (stating generally a buyer's specific right to reject all or part of a delivery containing non-conforming goods); U.C.C. § 2-608 (1991) (emphasizing a buyer's spe-
tain monetary relief,53 or return an item for repair or replacement,54 thus offering a direct form of insurance against product failure or malfunction. For the seller, the warranty attribute can be valuable as a quality signal which reduces or eliminates what is termed the "lemons"55 problem. The "lemons" problem refers to a particular form of market failure when sellers have significant informational advantages over buyers. For example, if used car sellers know the quality of their cars but buyers do not and cannot obtain that information, sellers of higher than average quality cars will withhold them from the market and buyers will purchase cars with a lower quality than expected. If the problem of information differences cannot be overcome, the willingness of buyers to purchase may decline to zero as the quality of cars sellers offer to the market continues to decline. The market will fail, even though at some positive prices in the market sellers would find it profitable to sell and buyers would be willing to purchase.

On a similar basis, assurance about quality and the attributes contained in the bundle is beneficial to the buyer and the seller to the extent that it solves or reduces the problems resulting from informational asymmetry. The provision of a warranty reduces the cost to the buyer of inspecting and negotiating about the particulars of the product and the means of correcting defects. The warranty lowers the transaction cost of the exchange for both the buyer and the seller.

In addition, for some sellers a warranty can provide a profitable opportunity to perform service and repair work when the seller has a comparative advantage in these areas.56 The seller may also have a specific right to revoke acceptance of a delivery containing non-conforming goods where the value to the buyer is substantially impaired).


54. "Warranties, in both commercial and consumer transactions, commonly provide that a buyer's remedy for a nonconforming good is to have the product repaired or replaced by the seller." JULIAN B. MCDONNELL & ELIZABETH J. COLEMAN, COMMERCIAL AND CONSUMER WARRANTIES: DRAFTING, PERFORMING AND LITIGATING ¶ 7.01 (1990) (discussing the use, drafting and enforceability of warranty remedies limited to repair or replacement of nonconforming goods).


56. George L. Priest, A Theory of the Consumer Product Warranty, 90 YALE L.J. 1297, 1308 (1981) (finding consumer will purchase repairs from seller when seller's price is less than cost of providing repairs by consumer). The warranty provided by the seller acts like an insurance policy. A seller will offer the insurance when the seller receives more in payment (from all buyers) for the insurance feature than it will cost the seller to provide the service. A buyer will be willing to pay for the insurance feature when the cost of the feature is less than the cost to the buyer of
cost advantage in the general inclusion of insurance to buyers of the product. Because of the value to consumers and the benefit to sellers, warranty terms will be offered and priced in the market.  

As a cost-effective method, sellers ordinarily will offer general warranty terms to the market for all consumers to purchase. If sellers did not offer warranty terms to the market as a whole, they would have to negotiate with each consumer individually for each desired term, a process that would be costly and time consuming. General terms will be offered, especially when sellers want to use warranties as signals of quality. Special warranty terms will be negotiated between a buyer and seller when a consumer's special needs are important or when a seller has a particular cost advantage in producing desired warranty protection. Thus, warranty terms will enter the price of the product both through generalized market behavior and through particularized negotiations.

D. Warranties and Insurance Problems

Because warranties offer a form of insurance, two particular problems may arise. A moral hazard problem is possible with insurance because a consumer has an incentive to use the product in a fashion which may more likely (than without the insurance) cause a problem covered by the warranty. When this result occurs, the cost of providing the insurance through the warranty is greater than if the consumer were induced to take more care and prevent the problem from occurring. In general, moral hazard causes an inefficient use of resources through excessive repair costs.

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providing repairs himself. A seller will be able to provide the service at a lower cost than a buyer when the seller has a comparative advantage at repair work due to the seller's specialized production expertise. The buyer implicitly pays for this insurance when the buyer purchases the product with the warranty included. See supra sections II.C and D. Since not all buyers will experience the problem and present warranty claims requiring service work, each buyer will pay only a portion (the expected value of the repair cost) of the cost of repair for the warranty attribute. The seller is able to offer the insurance term profitably when the claims costs are less than the amount paid by buyers in this form of the "insurance premium" embedded in the product price. See note 196, infra, for an example of how sellers respond to the excessive claims costs.

57. The provision of a warranty reduces the cost to the buyer of inspecting and negotiating about the particulars of the product and the means of correcting defects. The warranty lowers the transaction cost of the exchange for both the buyer and the seller. The benefits provided by a warranty through signaling quality-related information to the buyer or as an insurance policy from the seller to the buyer will be valued in the market and captured in the price of the product. See infra parts II.D and II.E.

58. See, e.g., Priest, supra note 56, at 1313-14 (discussing the increased incentive not to preserve health when an individual has health insurance).
To protect against a loss ($L$) which has a probability ($P$) of occurring, an individual will invest ($I$) no more than $I$, where $I$ equals $L$ times $P$ ($L$ times $P$ is the expected value of the loss when uninsured).\textsuperscript{59} For instance, a building owner will spend no more than $100 to reduce by 1% the chance of a fire if the fire will cause a loss of $10,000. However, with insurance that covers the full loss in the event of fire, the owner has no incentive to spend $100 to avoid the loss. Should the fire occur, the owner recovers $10,000 with or without the precautionary expenditure of $100. From the owner's point of view, spending the $100, when insured, is a cost which generates no benefit. The insured's incentive is to decrease the effort spent to reduce the probability of a loss. As a result, the loss is more likely to occur than if there were no insurance. This is an example of the moral hazard problem.

The inefficiency with moral hazard arises when the expenditure of $I$ dollars by the insured reduces the expected value of the loss ($L$ times $P$) by more than $I$. It would be in society's interest to spend the $I$ rather than suffer the loss, but the insured has no incentive to make the investment. Thus, losses which could be avoided in a cost-effective manner are not prevented.\textsuperscript{60}

The second insurance-generated problem is that of adverse selection, which arises because individuals, with the problem being insured against, have the greatest incentive to purchase the insurance.\textsuperscript{61} The classic example of adverse selection is medical insurance which insures against a specific medical problem. For example, cancer insurance will be most attractive to people who have cancer. To the extent that the cost and availability of insurance depend on spreading the cost of the loss, adverse selection leads to high cost and reduced availability. With adverse selection, loss pay-outs increase and, therefore, premiums must increase. The higher the premium, the less likely those with low chances of a loss will insure. Thus, the pool of insurance buyers becomes heavily weighted with high probability risks, and eventually

\textsuperscript{59} See generally Lutz, supra note 38 (discussing warranties and consumer loss probabilities).

\textsuperscript{60} For a discussion of how warranties generate moral hazard problems of product maintenance, see id. supra note 38, at 255. The more complex moral hazard problems which can arise when both buyers' and sellers' incentives change are considered in Russell Cooper & Thomas W. Ross, Product Warranties and Double Moral Hazard, 16 RAND J. ECON. 103, 113 (1985). For one approach to reducing moral hazard problems which are dependent on product quality attributes, see John Kambhu, Optimal Product Quality Under Asymmetric Information and Moral Hazard, 13 BELL J. ECON. 483 (1982).

the insurance cost approaches the value of the loss without insurance. If this happens, the insurance market will then fail.

One of the main causes of the adverse selection problem is asymmetric information. Purchasers of insurance have more and better information about the likelihood of a loss than do insurers. Typically, then, insurers can mitigate adverse selection problems by requiring complete information from potential insureds. For example, insurers can require disclosures of prior conditions or utilize examinations. When asymmetric information cannot be eliminated (or reduced to a manageable level), the market for insurance can collapse.  

For many products the problems of adverse selection and moral hazard caused by warranty insurance will not exist. Enforcing an insurance claim is expensive and time consuming and, unless the value of the claim is large enough, a warranty claim will not arise. Thus, there will be little reason for adverse selection and moral hazard problems. Sellers can also reduce these problems by restricting warranty terms to specific time periods, ownership conditions, and return rules.

Nonetheless, moral hazard and adverse selection will remain problems as long as warranty terms provide some form of insurance. The primary difficulty which prevents avoiding these problems is informational asymmetry. As long as buyers know more about a product's use than the seller does, these inherent insurance inefficiencies will remain. The only way to moderate them is to require full disclosure of pertinent information between the buyer and the seller. When both parties have the same relevant information, they can negotiate appropriate insurance terms in a warranty.

E. Warranties and Buyer's Inspection

An additional consequence of providing warranty insurance is that the buyer's incentive to perform cost-effective inspection is significantly reduced or possibly eliminated. Except where the cost of en-


forcing the warranty is high, the buyer has no incentive to inspect the product for defects. However, it is efficient for the buyer to take those steps to inspect which are cost-effective at the time of purchase. If buyers purchase obviously nonconforming products, transaction costs will increase when buyers return the products and seek appropriate remedies. Thus, where it is cost-effective, buyers should have the obligation to inspect for nonconformities under a seller's warranty.64

The requirement that buyers make reasonable, cost-effective inspections in purchasing warranty terms ought not to be onerous in any case. The buyer's obligation is to inspect for obvious defects or problems—the kind of inspection which would occur in the normal course of trading where the product is available and the buyer can inspect. When with reasonable caution and care a buyer can avoid a mistake or have it corrected at the time of purchase, it would be inefficient to allow the mistake or problem to remain undiscovered since subsequent losses caused by breach of the warranty and warranty enforcement costs would exceed the cost of the inspection.65 It is often in the buyer's interest to undertake some inspection. Buyers inspect to make sure that a product is indeed the one desired, to acquire knowledge about the condition and attributes of complex products, to anticipate future problems and needs, and to reduce the future expected transaction costs of exercising warranty claims. In fact, when purchasing expensive or very complex products, consumers often em-

64. Neither UCC section 2-313 nor the case law requires a buyer to conduct a cost-effective inspection or be barred from enforcing an express warranty with respect to nonconformities that such an inspection would have revealed. See Overstreet v. Norden Labs., 669 F.2d 1286, 1291 (6th Cir. 1982) (dictum); General Elec. Co. v. United States Dynamics, Inc., 403 F.2d 933, 935 (1st Cir. 1968); Interco Inc. v. Randustrial Corp., 533 S.W.2d 257, 261 (Mo. Ct. App. 1976); see also Cagney v. Cohn, 13 U.C.C. Rep. Serv. (Callaghan) 998, 1005 (D.C. 1973) (stating that the opportunity to inspect has no effect upon express warranty liability); Young & Cooper, Inc. v. Vestring, 521 P.2d 281, 291 (Kan. 1974). UCC Section 2-316(3)(b) provides that, when a buyer has examined the goods prior to entering into a contract or has refused to examine the goods, there is no implied warranty with respect to defects that the examination ought to have revealed. This limitation on the enforceability of an implied warranty does not impose the inspection obligation advocated by this Article. Comment 8 to UCC section 2-316 and the case law make clear that a buyer has no obligation to inspect the goods prior to purchase. Holm v. Hansen, 248 N.W.2d 503, 510 (Iowa 1976); Ambassador Steel Co. v. Ewald Steel Co., 190 N.W.2d 275 (Mich. Ct. App. 1971). An implied warranty is excluded with respect to defects which an inspection would have uncovered only if the buyer in fact conducted an inspection or the seller demands that the buyer conduct an inspection which the latter fails to do. Id.

65. This inspection requirement is comparable to but exceeds that in UCC section 2-316(3). As discussed above, although a buyer is precluded from asserting an implied warranty with respect to a defect that an inspection should have revealed, UCC section 2-316 only excludes such a warranty when the buyer in fact inspects the goods or refuses to do so after demanded by the seller. By not requiring a cost-effective inspection under the conditions discussed above, the UCC provides insufficient incentives for buyers to minimize the risk of defects that could be avoided prior to purchase.
ploy the services of experts for advice about performance, condition, and attribute existence. Since it is rational for buyers to inspect, question, and use experts, this obligation to conduct inspections will not be burdensome.

F. Warranties and Search Costs

In addition to the insurance and risk spreading values of warranty terms, warranties also promote an efficient allocation of resources by reducing search costs. Search costs occur when resources are used by buyers (and sellers) to obtain information (for example about price, location, or quality) about a product. The lower the search costs, the fewer the resources needed to facilitate transactions.

Enforceable warranties provide information in a cost-effective manner to buyers. When different sellers offer different warranty terms, a signal is provided to buyers about differential product quality which helps buyers distinguish each product's set of attributes from the others. A warranty can also reduce the buyer's search for additional information about product reliability and performance, since the seller stands ready to provide a remedy for nonconforming goods. In addition, a warranty reduces the costs for buyers of searching for repair services in the event of product failure, since the seller may agree to provide that service.

III. PROPOSED TEST FOR EXPRESS WARRANTIES

Since the market price is an indicator of attribute existence, the market price reflects the value of all attributes purchased by a buyer, and it is inefficient for all buyers to engage in explicit negotiation and

66. See infra notes 131-42 and accompanying text (discussing the effect a buyer or third party inspection on enforcement of affirmations or promises as warranties).

67. The need to expend some resources on research and information acquisition was first analytically presented in George J. Stigler, The Economics of Information, 69 J. Pol. Economy 213 (1961).

68. Search costs arise when buyers use resources to obtain information about the types, qualities, and terms available on the market. The use of resources for this purpose does not result in any more output being available to society, but only in a "better" match between buyer and seller. To the extent the better match can be made using fewer resources, more resources will be available for producing goods and services. Efficiency is enhanced by reduced search costs. See Nicholas M. Kiefer & George R. Neumann, Search Models And Applied Labor Economics (Cambridge University Press, 1989).

69. Id.

70. See Evan J. Douglas et al., Warranty, Quality and Price in the U.S. Automobile Market, 25 Applied Econ. 135 (1993) (showing that within a particular vehicle class warranties provide a quality signal); Esther Gal-Or, Warranties as Signal of Quality, 22 Can. J. Econ. 50 (1989) (stating that "the provision of a warranty necessarily changes the expected desirability of the product).
bargaining for warranty terms and other attributes, any test for determining whether a seller affirmation or promise is an express warranty needs to recognize the way that markets for complex products actually operate. It would be inefficient for a test to require prior knowledge by all buyers of all affirmations, promises, or product descriptions.\footnote{The case law and commentary are divided on the question whether a buyer needs to be aware of an affirmation, promise or description for it to be part of the basis of the bargain. For those requiring prior knowledge, see, e.g., Cipollone v. Liggett Group, Inc., 893 F.2d 541 (3rd Cir. 1990); Landman v. Bloomer, 23 So. 75 (Ala. 1898); Ciba-Geigy Corp. v. Alter, 834 S.W.2d 136 (Ark. 1992); Anderson v. Heron Eng’g Co., 604 P.2d 674 (Colo. 1979); Schmaltz v. Nissen, 431 N.W.2d 657 (S.D. 1988); Cuthbertson v. Clark Equip. Co., 448 A.2d 315 (Me. 1982); Global Truck & Equip. Co. Inc., v. Palmer Mach. Works Inc., 628 F. Supp. 641 (N.D. Miss. 1986); Interco Inc. v. Randustrial Corp., 533 S.W.2d 257 (Mo. Ct. App. 1976) (dictum); Stang v. Hertz Corp., 490 P.2d 475 (N.M. Ct. App. 1971); White & Summers, supra note 11, at 340-41; Murray, supra note 6, at 315.}

For the purchaser of a stereo receiver, for example, the opportunity of a representation being part of the basis of the bargain for the consumer is determined by the manner in which the stereo receiver is marketed. The analyses which most closely resemble that in this article are those by Robert S. Adler, the Task Force of the ABA, and the student comment. Adler and the Task Force take the position that a person who has not seen a representation, for example in a manual accompanying a product, should be entitled to enforce the representation since the buyer is paying the same price for the product as others in the market. This argument appears to be made on grounds of fairness or equal treatment for equally situated individuals and not on the market based model presented in this Article. See Adler, supra note 18, at 468-70; Apraisal, supra, at 1102. More closely related to this Article, the student author maintains that a person who has not seen a representation made to the market as a whole should be able to enforce it as a warranty since the representation is part of the foundation on which, or the commercial context in which, the sale is made. McIvers, supra, at 452, 458. He does not, however, develop a comprehensive market- and efficiency-based analysis for his thesis.

Although some courts have indicated that a buyer must know of a representation for it to be part of the basis of the bargain, they have allowed fairly minor knowledge of the possible existence of a warranty to satisfy the knowledge requirement. See Massey-Ferguson Inc. v. Laird, 432 So. 2d 1259 (Ala. 1983) (stating that because buyer knew about express warranty prior to delivery and was familiar with the type of warranty given with such machines, the plaintiff was entitled to enforce the warranty in the manual although the manual was not delivered with the machine); Winston Indus. v. Stuyvesant Ins. Co., 317 So. 2d 493 (Ala. Civ. App. 1975); Jackson v. Muhlenberg Hosp., 232 A.2d 879 (N.J. 1967); Task Force of the A.B.A. Subcommittee on General Provisions, Sales, Bulk Transfers and Documents of Title, Committee on the Uniform Commercial Code, An Appraisal of the March 1, 1990 Preliminary Report of the Uniform Commercial Code Article 2 Study Group, 16 DeL. J. Corp. L. 981, 1102 (1991) [hereinafter Apraisal]. See Adler, supra note 18, at 468-70 (noting a consumer unaware of a representation should be entitled to it because he is paying the same price as other consumers); Robert L. Nordstrom, The Law of Sales § 68, at 209 (1970); Sidney Kwestel, Freedom From Reliance: A Contract Approach to Express Warranty, 26 Suffolk U. L. Rev. 959, 976-77, 982-84 (1992) (noting in contract formation, the promisee’s acceptance is effective where he accepts an offer of an exchange of promises without knowing its terms or that the promise induced the performance); Kevin McIvers, Comment, The Meaning of “Part of the Basis of the Bargain,” 19 Santa Clara L. Rev. 447, 452 (1979) (interpreting the language of UCC section 2-313 as leading to the conclusion that the drafters must have intended to leave open the possibility that an express warranty could benefit a particular buyer to whom it was not personally communicated).
cost of the purchaser’s time in reading and processing the information
in the warranty prior to sale compared to the expected value of the
warranty would not justify such buyer behavior. It would be incor-
correct to assume that the absence of prior knowledge, inspection, or bar-
gaining implies that the buyer has received no value in exchange for
the price paid since the price reflects all the attributes embodied in the
product, known and unknown to the individual purchaser.

A. Terms Offered to the Market

The appropriate test for what affirmation or promise is an express
warranty is a market test. Those affirmations and promises made to
the market as a whole in the sale of a product, whether known or
bargained for by an individual buyer, are part of the product
purchased and should be treated as express warranties. The test
would ask whether for the price paid the product was offered in the
market with the seller’s affirmation, promise, or description. Exist-

the buyer never received the warranty and was not aware of it; bill of sale referred to all trailers
as coming with factory warranties).

72. See Murray, supra note 6, at 322-23 (stating that if every preformation statement had to be
read or heard and every examination of a model had to be meticulous, buyers would be forced to
take extraordinary cautionary efforts before concluding sales contracts); Sovern, supra note 45,
at 36-37 (stating warranties are of little value to consumers at the time of purchase, and there-
fore the consumer has little interest in learning about warranty terms). Other than for recovery
of consequential loss, which is likely to be excluded, the expected value of a typical warranty
with a repair or replacement remedy is the cost of repairs to the product to have it conform to
the warranty multiplied by the probability that such repairs will have to be made during the
warranty period. In the stereo example posited in the text, the cost of repairs may be $100, but
the probability of product failure during the warranty period may only be 3%. In that case, the
expected value of the warranty is only $3. If it would cost the consumer more than $3 to read
and process the warranty in terms of the consumer’s opportunity costs, it would be inefficient for
the consumer to read the warranty. Moreover, to the extent that it is highly likely that the
preferences of marginal buyers will be similar to the buyer’s own, it is very unlikely that the
buyer would have spent any time seeking a different warranty. To the extent that the prefer-
ences of enough buyers were different from those of the buyer in question, markets would tend
to segment, with new marginal buyers having preferences closer to those of the buyer in ques-
tion, again making it inefficient to read and process the warranty terms. The fact that some
express warranties may not be highly valuable to buyers is demonstrated by Charles W. Smith-
son & Christopher R. Thomas, Measuring the Cost to Consumers of Product Defects: The Value
of “Lemon Insurance,” 31 J.L. & ECON. 485 (1988). The authors concluded that the value of a
thirty-day buy-back program offered by Chrysler Corporation in the late 1970’s in which
Chrysler would buy back a new car within thirty days after purchase was worth only $2 to the
marginal buyer of a compact car. Id. at 502. The buy-back program operated much as a war-
ranty of satisfaction and allowed buyers to return their vehicles for any reason.

73. For comparable analyses, see Kwestel, supra note 71, at 969; and Nordstrom, supra note
71, at 209. For an argument that a buyer without prior knowledge of a representation should be
able to enforce it along lines of fairness and equal treatment, see Appraisal, supra note 71, at
1102 (stating that a warrantor will price its product to include the cost of warranty, and therefore
should be required to stand behind its affirmation whether the purchaser read the warranty or
not).
The presence of such a representation will be manifested in the general terms of the market for that product, not in the reliance by any particular buyer in any single transaction.

Under this test, affirmations or promises which are demonstrably offered to the market as a whole, except as noted below, will be included as express warranties. When a seller maintains that an affirmation or promise is not a warranty because it was not included in the market price, statistical tests can be used to ascertain whether the price included a payment for the representation. If it is contended that a warranty offered to the market as a whole is not part of a particular sale, the burden is on the seller to establish that the term was not offered to the particular buyer. The seller must introduce persuasive evidence that the parties manifested assent to a bargain explicitly removing the affirmation, promise or description from their deal or proof of negotiation or special pricing to reflect the missing term.

B. Individually Negotiated Terms—Quasi-Market

This market test applies with equal force to terms in individually negotiated or singular transactions unless those terms are idiosyncratic in character. A seller may have only one good for sale, e.g., an

74. Whether an affirmation or promise is offered to the market as a whole or only to a limited group of buyers must be decided by the trier of fact.

75. The basic exceptions are due to inspection, and for some false statements. See infra notes 131-45 and accompanying text (discussing inspection) and notes 172-86 and accompanying text (discussing misrepresentation exceptions).

76. Methods for statistical tests of the hedonic price model are identified in Sherwin Rosen, supra note 36. For examples of the use of statistical methods, see Timothy J. Bartik, The Estimation of Demand Parameters in Hedonic Price Models, 95 J. POL. ECON. 81 (1987) (noting an alternative instrumental variable approach can be used to determine effects of variables on other variables (such as the effect of changes in income on household budget restraints)).

77. If the buyer establishes that an affirmation or promise was made to the market as a whole, the seller than needs to prove that the affirmation or promise was not part of this particular deal. The burden is on the seller since ordinarily the affirmation or promise will be included in the price. Therefore, the burden is on the seller to prove that the buyer paid a discount price excluding the affirmation or promise from the deal.

78. See St. Charles Cable TV, Inc. v. Eagle Comtronics, Inc., 687 F. Supp. 820, 829 (S.D.N.Y. 1988) (presenting dictum that representation claiming descramblers would have less than a 4% failure rate could not have been part of the basis of the bargain because the plaintiff extracted substantial price concessions from the defendant based on the experimental nature of the goods; guarantee would have been contrary to the realities with respect to the then state of the art and the prototype being produced by the defendant); Alan Wood Steel Co. v. Capital Equip. Enter., Inc., 349 N.E.2d 627 (Ill. App. Ct. 1976) (purchasing at inordinately low price demonstrated that representation was not part of the basis of the bargain because the buyer was not relying); NORDSTROM, supra note 71, at 212 (stating the best single indicator of the basis of the bargain is the price paid—full price would indicate seller's statements were part of the basis of the bargain while any price less may indicate that the parties were exchanging the risk that the goods would be faulty for a lower price).
automobile. He may make a number of representations about the good, either in pre-sale literature, such as a newspaper advertisement, in pre-sale discussions with the buyer, or in the writing embodying the contract between the parties. Although the seller's representations pertain to only one good and ultimately can be enforceable by one buyer, that does not mean that all the representations are idiosyncratic. To be idiosyncratic, the representations must be of a character that is not valuable to the market as a whole but only to the particular buyer. Probably most of the representations about a good would be ones that the seller would make to any buyer in the market and would be representations that any buyer would value. With respect to these representations, all that should be required for a representation to be an express warranty is that the seller have made the affirmation or promise.

C. Idiosyncratic Terms—Non-Market

An idiosyncratic or non-market representation, on the other hand, is presumed to be part of the agreement of the parties and a warranty only if there is negotiation between the parties concerning the terms to a sale or there is an explicit affirmation or promise by a seller and reliance by a buyer. Unless one of these requirements is met, substantial error costs will exist in the enforcement of representations that in fact were not made.

This presumptive market test is consistent with how modern markets provide products for buyers. This test will promote market efficiency by reducing transaction, search, and information costs. Finally, this test will provide incentives for sellers to create the optimal terms and attributes for products while also providing incentives for both buyers and sellers to correct misinformation in a cost-effective manner.

79. The existence of a representation, even in this case of an idiosyncratic representation, does not depend on the use of an expert opinion or inspection. For the role of experts and buyer inspection, see infra text accompanying notes 131-44.

80. Since an idiosyncratic representation is uniquely valuable to a particular buyer, it is unlikely that the seller will offer it to the market as a whole. The buyer, having better information about his or her idiosyncratic preferences, is more likely to reveal his or her preferences to the seller since it is cheaper than having the seller discover them. See infra note 125. As a result, it is likely that the buyer will initiate bargaining with respect to a term by at least bringing the preference or representation to the seller's attention. Moreover, if the representation is uniquely valuable to a buyer, it is probable that the buyer will expend resources for it and rely on its presence in the transaction with the seller. Otherwise, the representation would not be included in the deal. Therefore, if the elements of negotiation or seller affirmation or promise and buyer reliance are absent from a transaction, it is more likely than not that the seller did not make the representation.
IV. APPLYING THE PROPOSED EXPRESS WARRANTY TEST

The market provides strong incentives to create, in a cost-effective manner, products which have terms and other attributes desired by consumers and profitable to sellers. In this section, this Article, considers whether the market will provide appropriate warranties to the market in general and, thus, have the value of such warranties included in the market price. This section also examines how market discipline and a market based test for express warranties will improve the allocation of resources. In the following sections, this Article applies this test for express warranties in particular situations.

A. Prepurchase Claims Made to the Market in General

Despite the analysis about the manner in which markets create attributes including express warranties, some courts have refused to enforce affirmations or promises of which the buyer was unaware. In dictum, the court in Cipollone v. Liggett Group, Inc. rejected a trial court's instruction that a cigarette manufacturer could be held to have made an express warranty in commercials proclaiming the safety of its cigarettes if the representation would naturally induce a purchase of its product even if the individual buyer seeking to recover under the representation did not rely on it. The court stated:

Under the extreme version of this theory [that the objective manifestations of the parties determine what is part of the bargain] . . . all the buyer should have to show is what the seller agreed to sell. In other words, an express warranty would be created when a seller makes statements to the public at large that would induce a reasonable buyer to purchase the product, even if the actual buyer never heard those statements. We find this result untenable, however. . . . [T]his interpretation drains all substantive meaning from the phrase 'basis of the bargain,' and would allow a seller [sic: buyer] to collect even if that seller [sic: buyer] was unaware of the warranty until she walked into her attorney's office to file suit.

As our analysis of how markets function in determining the content of product attributes indicates, the court's conclusion is faulty. A

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83. Id.
84. Id. at 568.
promise or affirmation may be a part of the basis of the bargain for which the buyer has paid the price even if he or she is unaware of it.85 It is the market that determines the attributes of the underlying transaction regardless of the knowledge or ignorance of those attributes by the buyer, and the buyer should have a legally enforceable right to those attributes.

The court's reasoning is consistent with the bargain theory of contracts which requires that a promisee be aware of a promise before the promisee's promise or performance can be given in exchange for the promise.86 For example, a person who performs the conduct for which an offer of reward is made cannot enforce the offer if he or she does not know of the reward prior to or while engaging in the conduct.87 The refusal to enforce the offeror's promise when the performing party is unaware of it can be justified on the ground that such enforcement is not necessary to facilitate a wealth maximizing exchange since there is no exchange of the performing party's conduct for the promisor's offer.88 However, imposing a knowledge requirement is inefficient and unnecessary, for terms such as warranties which are made to

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85. The court in Cipollone held that an affirmation or promise is presumed to be part of the basis of the bargain if the buyer has become aware of it, unless the seller proves that the buyer knew the representation was untrue. Id. The court added that if the seller proves that the buyer disbelieved the affirmation or promise, the buyer could still enforce the representation as a warranty if the buyer could prove that she nevertheless relied on the representation. Id. at n.31.

86. E. ALLEN FARNSWORTH, CONTRACTS § 2.10 (2d ed. 1990). As the author indicates, the law tends to deal with this issue under the requirement of mutual assent although it also bears on whether there is consideration, i.e., a bargained-for exchange. See RESTATEMENT (SECOND) OF CONTRACTS § 23 cmt. c (1979) (stating that a person who acts without knowledge of an offer is not within the offer's terms).

87. See Sumerel v. Pinder, 83 So. 2d 692 (Fla. 1955) (stating that where information was given to police before the reward was made, there was no acceptance of an offer that would give rise to a contract); Alexander v. Russo, 571 P. 2d 350 (Kan. Ct. App. 1979) (noting it would be contrary to public policy and unconscionable to permit the mother of a thief to collect the reward for stolen goods where the mother gave the information about the stolen goods without knowledge of the reward and after several months of having such knowledge); Broadnax v. Ledbetter, 99 S.W. 1111 (Tex. 1907) (ruling that the knowledge of the reward prior to recapturing a prisoner was essential in order to collect the reward). For cases holding that prior knowledge of a reward is immaterial to entitlement, see Sullivan v. Phillips, 98 N.E. 868 (Ind. 1912); Dawkins v. Sappington, 26 Ind. 199 (1866). The Restatement (Second) of Contracts provides that an offeree can accept such an offer if the person learns of the offer prior to performing all of the conduct bargained for by the offeror. RESTATEMENT (SECOND) OF CONTRACTS § 51 (1979).

88. The traditional basis for differential treatment of bargained for promises, which are enforced, and gratuitous promises, which generally are not enforced, is that the former produce wealth by facilitating the exchange of goods or services to a higher use while the latter are mere "sterile" representations. See JOHN EDWARD MURRAY, JR., MURRAY ON CONTRACTS § 5 (1990) (noting economic exchange increases individual values and the value of the resources of society); Lon L. Fuller, Consideration and Form, 41 COLUM. L. REV. 799, 815 (1941) (stating that while an exchange of goods conduces to the production of wealth, a gift is a "sterile transmission"). The characterization of gratuitous promises as being nonwealth producing is criticized in Andrew
the market should protect the buyer who knows he is entering into a bargain where he is unaware of all its terms. In such a circumstance there is a wealth maximizing exchange that the law should enforce, and a knowledge rule increases the costs of that exchange. As discussed earlier, requiring *ex ante* knowledge of all the terms offered to the market imposes inefficient search costs. A buyer may value a representation made to the market in the sense of being willing to pay for it, but the search costs to discover and process the representation may cause the buyer's total costs to exceed that value. Therefore, to reduce these transaction costs and maximize the value of the transaction to both the seller and the buyer, the representation to the market should be enforceable by the buyer without prior knowledge of the representation's existence or characteristics.

The only argument for denying enforcement of an affirmation or promise by a buyer ignorant of its existence is that the buyer may not have valued the representation at the time of purchase. The buyer may have been willing to purchase the product at the seller's price without the warranty. Refusal to enforce a representation when a buyer does not value it would be consistent with a theory of consideration that required a promisee's performance or promise *in fact* be induced by a promisor's promise. When a promisee is indifferent about a promisor's promise, theoretically there is no wealth maximiz-
ing bargained-for exchange and therefore no basis to enforce the promisor's promise. The problem with that argument as applied to pre-purchase claims made to the market is that a seller's promise or affirmation is part of an exchange, not an isolated gratuitous promise, and allowing an inquiry into whether a buyer valued a representation prior to purchasing a product would undermine the value of the representation as a warranty.

Although the doctrine of consideration purports to focus on the reciprocal inducement of a promise for a promise or a promise for a performance, the law, as in the area of the mutual assent, is concerned with the external manifestation of a bargain rather than the subjective states of minds of the parties or their subjective knowledge of all the terms of the proposed bargain. The law examines the outward manifestations of the parties rather than their subjective states of mind because the latter are so costly and difficult to ascertain, the parties frequently have mixed motives or incentives in making a promise or rendering a performance, and an examination of subjective motives would generate substantial uncertainty costs about the enforcement of promises when promisors perceived that they had some vehicle for escaping a disadvantageous transaction.

Thus, unless there is a mere pretense of a bargain, for example, where a father promises to purchase a broken toy from his son for one million dollars a year for ten years to avoid gift or estate taxes, the law will not inquire into subjective states of minds of the parties. In many instances, although a buyer may subjectively be unaware of a promise in the overall bargain, the buyer is giving his promise or the price in exchange for all the terms in the bargain and seeks whatever promises are made, both known and unknown. If a seller were allowed to challenge the value the buyer attached to a representation of

(2) The fact that a promise does not of itself induce a performance or return promise does not prevent the performance or return promise from being consideration for the promise.

Restatement (Second) of Contracts § 81 (1979) (emphasis added).

92. Id. § 71.
93. Farnsworth, supra, note 86, § 3.6.
94. Restatement (Second) of Contracts § 71 cmt. b (1979).
95. Arthur L. Corbin, 1 Corbin on Contracts § 58, at 244 (1963).
96. Restatement (Second) Contracts §§ 71 cmt. b & 81 cmt. b (1979); Kwestel, supra note 71, at 986-87.
97. Kwestel makes a comparable argument that the representation should be enforceable because the buyer is paying for all, not some, of the seller's representations. Kwestel, supra note 71, at 969. His argument differs from this Article's in that it appears in part to be based on grounds of fairness to the buyer and not a market based theory for how warranties are created. Id.
which the buyer was unaware, it would be difficult, if not impossible, for the buyer to prove that he attached any value to the claim.

B. Terms Not Seen Before the Sale

Closely associated to unseen prepurchase affirmations or promises of which a particular buyer is unaware are representations that are contained in manuals or brochures accompanying a product (perhaps some of which are enclosed in the container for the product) and are not read by the buyer until after the purchase. The representation may involve an item about which very few buyers are aware prior to purchasing the product. A simple example is an automobile manual that describes all the functions and methods of operating a stereo receiver with a CD player that comes with the car. The question arises whether a buyer should be able to enforce a representation in the manual as to how the receiver should operate or the number of features it possesses if the buyer has not read the manual until after purchasing the car.98

If a purchaser is physically injured by relying on a false representation, he may be able to recover in tort law.99 If, however, the product simply does not operate in the manner specified in the manual or brochure or lacks one of the attributes mentioned therein, resolution of the question whether the representation should be treated as an express warranty is more difficult. The answer depends on two issues: first, whether the market operates to include the claim, even though unseen, as part of the price for which the buyer has paid; second,

98. See Global Truck & Equip. Co. v. Palmer Mach. Works, Inc., 628 F. Supp. 641 (N.D. Miss. 1986) (holding a purchaser who did not receive a brochure before purchasing the truck could not enforce the brochure’s representations that a truck could handle all kinds of soil). Compare Cuthbertson v. Clark Equip. Co., 448 A.2d 315 (Me. 1982) (holding that employee killed when front loader tipped over could not sue for breach of warranty in manual employer had not read) with Daughtrey v. Ashe, 413 S.E.2d 336 (Va. 1992) (holding that buyer entitled to enforce representations concerning bracelet in box containing same); and Massey-Ferguson, Inc. v. Laird, 432 So. 2d 1259 (Ala. 1983) (holding that plaintiff entitled to enforce warranty in manual not delivered with combine since warranty was discussed at time of sale and the plaintiff was familiar with the type of warranty given with such machines). For commentators maintaining that a buyer should be able to enforce the representation in a manual which he has received but not read, see Kwestel, supra note 71, at 1011; Murray, supra note 6, at 322-23.


100. The evidence is that markets do price attribute terms, including warranty terms and features. See Jennifer L. Gerner & W. Keith Bryant Appliance Warranties as a Market Signal, 15 J. CONSUMER AFF. 75-86 (1981) (finding that the market for household appliances did offer a variety, and changing set, of warranty terms). They also found that the value of warranty terms responded to changing market conditions. Jennifer L. Gerner & W. Keith Bryant, The Price of a
whether efficiency is enhanced by enforcing the representation without the buyer having been aware of it prior to purchase.101

1. Inexpensive or Repeat Purchase Products

Resolving the first issue is not difficult for relatively inexpensive items which are purchased on a repeat basis. Here, to retain the goodwill of repeat purchasers, the seller will have to provide the terms that buyers prefer, including the terms in manuals which they do not read until they operate or assemble the product. If a seller fails to include terms that buyers prefer, buyers will move to other sellers who will provide the terms in a cost-effective manner. Failure to provide the desired terms will either drive the seller out of the market or reduce the seller’s price. Thus, sellers will expect the terms to be enforced and offer only those terms that are cost-effective and valued by buyers.

2. Expensive or Infrequently Purchased Products

With respect to durable goods or goods that are purchased on a less frequent basis, mechanisms other than repeat purchases come into play to determine the contents and commitments in the manual or the product’s price. First, even for these goods there is a concern about repeat sales. The buyer who has purchased one make of automobile, for example, may not make a subsequent purchase if the seller failed to provide warranty terms he or she preferred or if the representations that accompanied the original purchase proved to be untrue and the purchaser suffered “buyer’s remorse.” This same argument holds in instances where sellers offer a variety of items (e.g., department or appliance specialty stores) to the market: sellers will value the return of consumers to purchase additional or different goods. Anticipating that a buyer may not return for subsequent purchases if the statements in the manual are ones which the buyer does not prefer or are incorrect, the seller has a strong incentive to include correct information and warranty terms so as to maximize its return from repeat or return purchases.102

810 DEPAUL LAW REVIEW [Vol. 45:781

101. See supra notes 71-72 (discussing whether a buyer needs to be aware of an affirmation to be part of the basis of the bargain).

102. There are of course “fly-by-night” operations which do not expect or depend on repeat purchases. Moreover, there are some product attributes, known as credence attributes, with
Second, in addition to maintaining its return from repeat purchases, a seller has an incentive to provide correct information and desired terms to create goodwill value and enhanced reputation. Word of mouth among purchasers can result in other potential buyers not purchasing a product if one buyer does not receive accurate information or sufficient commitments from a manual and transmits that fact to other potential purchasers. Consumer advocacy groups and media reports also discipline seller behavior where reputation is valuable.  

Third, some buyers will rely on third party sources of information, such as Consumer Reports. These sources provide independent verification of the content and truthfulness of representations in a manual. Consumers rely on such third party sources prior to making a purchase involving a high cost and extreme dissatisfaction if the product fails to perform up to expectations or representations.  

respect to which the seller has no incentive to tell the truth since buyers simply must trust the seller that such attributes exist. See Michael R. Darby & Edi Karni, Free Competition and the Optimal Amount of Fraud, 16 J.L. & ECON. 67, 69 (1973) (stating that credence qualities are expensive to judge and arise whenever a good is used with other goods of uncertain properties); Ellen R. Jordan & Paul H. Rubin, An Economic Analysis of the Law of False Advertising, 8 J. LEGAL STUD. 527, 530-31 (1979) (arguing that credence qualities cannot be monitored by the nonexpert, even after consumption, and therefore the purchaser must rely on the seller). The assumption of this Article is that the attributes to which the representations pertain are either search attributes, i.e., ones whose existence the buyer can ascertain prior to purchase, or experience attributes, i.e., ones whose existence a buyer can ascertain through experience.


104. See Sharon E. Beaty & Scott Smith, External Search Effort: An Investigation Across Several Product Categories, 14 J. CONSUMER RES. 83, 90 (1987) (citing findings which showed that people tended to use neutral sources, such as Consumer Reports; with more expensive purchases); see also CONSUMER REP. BUYING GUIDE 1996, 30-32 (commenting on audio production and enhancement of television sets)); CONSUMER REP., May 1995, at 357 (specifying convenience devices on clothes dryers).

105. See Michael J. Houston, Consumer Evaluations of Product Information Sources, in CURRENT ISSUES AND RESEARCH IN ADVERTISING 135, 140 (James H. Leigh & Claude R. Martin Jr. eds., 1979) (suggesting a likely pattern for consumers’ usage of third parties as sources of information includes reference to other persons and product rating publications to discover product attributes such as dealer reputation, durability, and price); William B. Locander & Peter W. Hermann, The Effect of Self-Confidence and Anxiety on Information Seeking in Consumer Risk
Finally, if a statement provided in such a manual is incorrect, a seller is likely to incur avoidable administrative costs. It will have to deal with disgruntled customers, who may lack a legally enforceable warranty claim, but who will nevertheless complain to the seller if the good failed to conform to a representation in the manual. Buyers will learn of incorrect promises and affirmations through word-of-mouth, consumer advocacy groups, and/or third party purveyors of consumer information. If statements about product attributes in a manual are found to be inaccurate, buyers will treat their value as approaching zero and reduce the market price at which they will buy the product. Buyers who value the attributes sufficiently will procure the attributes from an after-market source, such as a specialty store that sells automobile stereo equipment.

Therefore, third-party verification, word-of-mouth information, and the value of seller reputation provide substantial incentives for sellers to include accurate representations that buyers prefer in the manuals they provide. Thus, it is rational for buyers to assume that they are purchasing accurate and preferred information and commitments as part of their underlying deal and for third parties to verify the accuracy of promises and affirmations made by sellers.

3. Efficiency and Prepurchase Knowledge

The above analysis demonstrates that seller affirmations in a manual or brochure accompanying a product are likely to be included in the price and, for present purposes, to be the kind of terms that buyers prefer. The latter is extremely important to the question of whether a buyer should have prepurchase knowledge of such affirmations or promises to be able to enforce them as warranties. Since it is highly likely that such representations represent buyer preferences, there is little value in buyers examining the claims prior to purchase to determine whether that is the case. Moreover, as demonstrated previously, the \textit{ex ante} expected value of many warranties, including some for durables, is not very high\textsuperscript{106} Given the high probability that a representation will reflect consumer preferences and that it might not have a high expected value, it is not efficient for consumers to expend substantial resources to determine the existence and content of the representation prior to purchase. The cost of conducting a prepurchase

\textit{Reduction}, 16 J. Marketing Res. 268, 273 (1979) (theorizing that specific self-confidence has a significant impact on information seeking: the higher a consumers self-confidence, the greater the tendency to seek information sources as the complexity of the product rises).

106. \textit{See supra} note 72 (noting that product warranties may be of little value to the consumer at the time of purchase).
investigation of a warranty's terms may be increased by its location in a box containing the product and/or in a manual that is many pages in length.\textsuperscript{107} Therefore, it is rational economic behavior not to find and investigate the warranty terms prior to purchase.

As with unknown prepurchase affirmations or promises, it might be maintained that a purchaser unaware of a claim may not have valued the seller's representation and therefore theoretically did not bargain for it.\textsuperscript{108} This argument falters because buyers are likely to anticipate the presence of manuals containing affirmations or promises constituting warranties whether or not they know \textit{in fact} about their existence in the particular transaction given the frequency with which such manuals accompany such products. As a result, it is much more likely that the buyer gives his promise or the price in exchange for all terms and product attributes, both known and unknown. It is less likely that the buyer is indifferent about an affirmation or promise based solely on his unawareness that it exists in the particular transaction.

C. Warranties Contained in Express Contracts

So far the discussion for enforcing promises, affirmations, or descriptions as warranty terms priced in the market has related to representations in communications such as advertising and brochures and in documents accompanying a sale such as a manufacturer's manual for the product. In a number of those instances, the affirmation or promise was contained in a communication from a remote manufacturer with whom the buyer lacked privity of contract.\textsuperscript{109} The question

\textsuperscript{107} To increase the presale availability of warranties on consumer products, the Magnuson-Moss Act provides that the Federal Trade Commission shall adopt rules "requiring that the terms of any written warranty on a consumer product be made available to the consumer prior to the sale of the product to him." 15 U.S.C. § 2302(b)(1)(A) (1994). Pursuant to the statute, the Federal Trade Commission has adopted a rule requiring presale availability of Magnuson-Moss written warranties. 16 C.F.R. § 702 (1993). Under the rule, a warrantor such as a manufacturer must provide a seller with warranty information in one of several alternative manners. 16 C.F.R. § 702.3(b). The seller is then obligated to furnish the information to consumers. 16 C.F.R. § 702.3(a). One of the most common ways for sellers to comply with the rule is to post signs, either in the store or in a department, calling attention to the fact that warranties are available on request and then maintaining a binder with warrantor warranties. CLARK \& SMITH, supra note 12, § 18.02[2]. Although this warranty information reduces consumers' search costs, consumers still must engage in somewhat costly presale search behavior to utilize it. Moreover, the statute and Federal Trade Commission Rule are limited to Magnuson-Moss written warranties, warranties that are not given on many products, including consumer products. 16 C.F.R. § 702.1 (c).

\textsuperscript{108} See \textit{supra} text accompanying notes 86-91 (discussing the argument that because the buyer was unaware of the promise, the buyer did not bargain for it).

\textsuperscript{109} See, e.g., Cippollone v. Liggett Group, Inc., 893 F.2d 541, 566-67 (3rd Cir. 1990) (considering a suit by a remote buyer against a cigarette manufacturer based on claims made in its advertisements).
presented here is the basis for enforcing contractual representations where the buyer and seller are in privity of contract.

1. Standard Form Written Contracts

When an express representation is contained in a standard form contract used either by all or many sellers within an industry or only by a particular seller, the affirmations or promises contained therein should be enforceable so long as the buyer has manifested assent to the writing, generally by signing it, whether or not the buyer is aware of the representation and whether or not he or she valued the representation. Part of the rationale for this position is based on our earlier discussion of how markets generate product attributes. In the case of a standard form contract, the terms are produced by the interaction of sellers and marginal buyers attempting to maximize net revenues to the former and value to the latter. A seller seeking to maximize net revenue will include in the standard form those terms that are necessary to attract sufficient buyers so that the seller will sell an optimal quantity of goods, a quantity at which the seller's marginal revenue equals marginal cost. To obtain this objective and provide for rules governing the sale, the seller will include various terms, some of which may be known by and very important to only some of the buyers in the market. As a result, a buyer who manifests assent to a standard form may attach no value to an express affirmation or prom-

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110. The standard form used by an individual seller will reflect the interaction that it has with marginal buyers in attempting to maximize its net income. A seller may include terms different from others in the same industry to provide market segmentation and attract buyers whom it thinks prefer different terms from those offered by others in the industry or due to cost differences.

111. See Kwestel, supra note 71 at 982-84 (arguing that buyer who does not value an affirmation or promise should be able to enforce the representation because it is part of the price that he paid the seller and because the common law of contracts does not require that a promisor in a bilateral contract demonstrate that he was motivated by one part of the other party's promise in making a bargain for exchange).

112. See supra notes 24-40 and accompanying text (discussing product attributes).

113. See supra notes 28-30, 36-45 and accompanying text (noting markets establish a product's attributes by maximizing the utility to the buyer and the value received by the seller). But cf. Henningsen v. Bloomfield Motors Inc., 161 A.2d 69 (N.J. 1960) (holding disclaimer of warranty and limitation of liability unenforceable as contrary to public policy); Freidrich Kessler, Contracts of Adhesion—Some Thoughts About Freedom of Contract, 43 COLUM. L. REV. 629, 632, 640 (1943) (stating that standard contracts in the hands of powerful industries and commercial overlords empower them to deviate terms and impose a new feudal order); David W. Slawson, Standard Form Contracts and Democratic Control of Lawmaking Power, 84 HARV. L. REV. 529 (1971) (reasoning that because standard form contracts are imposed rather agreed upon, they are universally unfair; to restore fairness, terms should be controlled by standards derived from parties' conduct and equity).

ise in a standard form. Nonetheless, he or she should be able to enforce the representation since it is part of the bundle of attributes that was purchased. Similarly, a buyer may not have negotiated the terms of a standard form or read its terms. Nevertheless, the buyer should be able to enforce the terms for the reason just articulated.

As in the case of prepurchase representations or those contained in documents or manuals accompanying products, the promises or affirmations in standard form contracts should be enforceable even if a purchaser is unaware of a representation because the transaction costs for each buyer to negotiate such terms individually or even learn of their existence would be excessive in relationship to their value.\(^{115}\)

Although the representations are contained in a writing which may obviously be contractual in nature, the costs of discovering, reading and processing the writing's terms may be quite high.\(^{116}\) Such documents may be long and dense and contain verbiage that is difficult for some people to comprehend.\(^{117}\) Given the fact that the affirmations or promises made in such documents are likely to reflect buyer preferences,\(^{118}\) there is little value in a particular buyer examining and processing the seller's affirmations or promises.

As with previously discussed representations, there is some likelihood that enforcing affirmations or promises in favor of buyers who are unaware of their existence will result in some buyers being able to enforce terms to which they might have been indifferent.\(^{119}\) Again, it might be asserted that such buyers did not bargain for the sellers' promises, negating the theoretical basis for consideration.\(^{120}\) The objection to such an assertion is stronger here than for affirmations or

\(^{115}\) See supra text accompanying note 72 (reasoning that because some warranties are of little value to consumers at the time of purchase, it is not economically efficient to require bargaining or inspection prior to sale).

\(^{116}\) See supra text and note 72 (discussing bargaining for warranties).


\(^{118}\) To the extent that the preferences of marginal buyers differed from those of other buyers, a market opportunity would exist for sellers to offer different warranties to capture that portion of the market. See Holdych & Ferrell, supra note 29, at 254-55.

\(^{119}\) See supra text accompanying notes 91 and 108 (stating that if a buyer is unaware of a promise, there is theoretically no bargained for exchange and therefore no basis to enforce the promise).

\(^{120}\) See supra note 92 and accompanying text (discussing the theory of consideration which requires that a promisee's performance is in fact induced by a promisor's promise).
promises made in other contexts. The buyer who purchases a product pursuant to a standard form contract, which he does not read, clearly understands that he is purchasing or making an obligation to purchase and assumes that his price is being given for whatever terms the writing contains. The purchaser knows he is unaware of contract terms that may be favorable to him and believes that he is paying for all the terms in the writing, both known and unknown. As a result, it is difficult to say that the buyer is not paying or bargaining for unknown terms. Moreover, proving that a buyer either would or would not have valued a warranty had he known about it would be difficult, requiring much subjective evidence, and would undermine the value of such terms. Therefore, a buyer who is unaware of affirmations or promises in the standard form should be able to enforce them as warranties.

The only instance in which the standard form warranty should not be enforceable by the buyer is when there is evidence that the buyer manifested assent or negotiated to remove the term from the contract which will be evidenced in many transactions by a price reduction from that at which the product is generally sold.

2. Nonstandard Form Written and Oral Contracts

Perhaps the transaction for which one might question application of our market based test for express warranties is one involving a nonstandard form written or oral contract. The initial reaction is to conclude that, because of the individually negotiated character of the transaction, the contract is one for which the buyer should have to prove that she knew of, negotiated for, or relied on an affirmation or promise for it to be enforceable. This reaction is based on the assumption that, unless the buyer had this knowledge or negotiated for

121. This analysis is not intended to preclude the possible unenforceability of a term adverse to a buyer that he or she had no reason to believe might be included in an agreement. The Restatement (Second) of Contracts, Section 211 provides that a term is not part of a standardized agreement if one party to the agreement had reason to know that the other party would not manifest assent to the agreement if he or she knew the term was part of the agreement. Restatement (Second) of Contracts § 211 (1979); see also U.C.C. § 2-606(b) (Tentative Draft, Jan. 1996) (providing that, absent express agreement, a consumer is not bound by a term in a standard form to which the consumer assented if the consumer could not reasonably have expected the term to be in the agreement). Section 211 of the Restatement does not, however, apply to affirmations and promises in written sales contracts, both because buyers expect such terms in the writings and because the terms are not oppressive or adverse to their interests. Restatement (Second) of Contracts § 211 (1979).

122. See supra text accompanying note 78 (requiring evidence of negotiation or special pricing to remove market representations from the deal).
the term, it could not have been part of the parties' agreement or included in the contract's price. These assumptions are false.

When a seller prepares the terms of a nonstandard form contract, he must determine what terms are going to maximize the value of the sale. Unless the seller has some *ex ante* reason to believe that the buyer has preferences with respect to his product different from those of other potential buyers in the market, he will offer terms that would be acceptable to buyers generally and not simply to those with idiosyncratic tastes. The reason he will do so is twofold, to reduce transaction costs in putting the deal together and to maximize the return on the transaction. If the seller believes that the buyer, and the market in general, values an enforceable warranty for his product and the price the buyer is willing to pay is higher than his cost of providing the warranty, he will offer a warranty. If not, he will not. Failure to include a warranty for which the buyer would be willing to pay more than the seller's cost would result in a less than optimal sale for the seller. Accordingly, the seller will include the price of the warranty in his product price and include the term in the contract with the buyer even without the latter's *ex ante* knowledge or negotiation.

123. Of course it is possible for the buyer to prepare the terms of sale. Then the seller simply adopts the buyer's affirmations or promises as his own.

124. The optimal contract is one that maximizes the value of both parties to the transaction. Of course a seller may attempt to capture part of the gain that would be created for the buyer under such a transaction. Even if that is true in some transactions, it does not affect this analysis because this Article is dealing with situations in which the seller *has* included an affirmation or promise even if the seller's predominant motive is to increase its gain by increasing the price at which it will be able to sell the product. To accomplish that objective, the affirmation or promise must be valued by and beneficial to a prospective buyer.

125. The seller will probably not offer terms that appeal to a buyer's idiosyncratic tastes since it is cheaper for the buyer who knows those tastes to reveal them than for the seller to discover them.

126. Some might question whether a seller would offer a warranty initially or wait to include it in later negotiations with a buyer. Although a seller might engage in this latter behavior, that is not the question presented in the text. There the question is why the seller will include the representation in the contract, either prior to or after negotiation with a buyer, and whether it is reasonable to believe that the representation is included in the price and part of the agreement between the parties.

127. See supra note 124 (reasoning that the optimal contract is one that maximizes the value of both parties to the transaction).

128. See Jack Hirshafher & Amiha Glazer, Price Theory and Applications 247-58 (5th ed. 1992); Hal R. Varian, Microeconomic Analysis 52-71 (1978). Suppose for example that a seller is selling a used car. The seller has just rebuilt the hydraulic system in the brakes. Assume that he believes buyers would be willing to pay $300 more for a car with a warranty that the brakes are nondefective. If the present cost to him of providing the warranty is $250 (the expected cost of a breakdown and repair by the seller), the seller will be $50 better off offering the car with the warranty.
Even though a transaction is individually negotiated, a buyer might be unaware of a contract term for a variety of reasons: inattention to the contract terms either oral or written, oversight in reading a written contract, or simple failure to read a written contract. If in an oral contract a buyer fails to hear an affirmation or promise, it might be possible to conclude that the buyer had no reason to believe that he was paying for the representation in question. This conclusion is less likely to be true with a writing, for a buyer probably assumes that he is paying for all the terms in the writing, whether or not he has read it and even if he has overlooked a term by mistake. Therefore, it is more likely that he is bargaining for all the terms in the contract. Moreover, as described in prior sections, under the objective theory of contracts, a buyer’s outward manifestation to a bargain is sufficient to establish the existence of a bargain and satisfy the requirement of consideration.129

Although determining the contents of a nonstandard form contract might not be as onerous as for a standard form writing, reading and evaluating a written contract still involves the opportunity cost of the buyer’s time. Requiring the buyer to know of an affirmation or promise prior to purchase would therefore increase transaction costs, perhaps in some transactions by an amount exceeding the value of the warranty, with little or no gain to the parties. Therefore, from an efficiency perspective, ex ante knowledge of, bargaining for, or reliance on, an affirmation or promise ought not be required to create an express warranty.

The only circumstance in which a court should require evidence of negotiation or bargaining between the parties or proof of a representation by the seller130 and reliance by the buyer is when the affirmation or promise is idiosyncratic in the sense that it is valuable only to and would therefore only be purchased by the particular buyer involved. Although the buyer may still have a variety of motives in purchasing the affirmation or promise, he must attach some value to it or he otherwise would not purchase it. In the situation where the warranty would be uniquely valuable to a particular buyer, the request for

129. See supra text accompanying notes 89-97 (analyzing the motives or causes for entering into a bargain and the relevant consideration required). In a dissenting opinion in Harlingdon & Leinster Enterprises Ltd. v. Christopher Hull Fine Art Ltd., 3 W.L.R. 13 (1990). The opinion by Lord Justice Stuart-Smith correctly analyzed the question whether a buyer must prove reliance on a description that is contained as one of the terms of a contract. He said: “If it is a term of the contract . . . the purchaser does not have to prove that he entered into the contract in reliance on the statement.” Id.

130. A buyer may provide for an express warranty in its manifestation of assent. Such an inclusion is particularly likely when the warranty is idiosyncratic in nature.
inclusion of the warranty in the deal will most likely come from the buyer since he will more likely know the attributes he wants than the seller. Therefore, it would be expected that the buyer would initiate bargaining for the warranty, which would show that the affirmation or promise was part of the basis of the bargain. Without proof of negotiations or reliance, there may be substantial error costs in establishing the existence of idiosyncratic representations.

D. Buyer Inspection or Use of Expert Opinion

Other situations in which there is a question whether a seller's statement should be treated as an express warranty are those where a buyer relies on her own inspection of a good to determine whether the good possesses the attribute represented\(^\text{131}\) or there are obvious defects that can be discovered in a cost-effective manner. Buyer inspection can be any conduct from simply looking at a product to make sure that there are no obvious defects or imperfections, to a detailed part-by-part analysis. Inspection can be done by either the buyer alone or with the advice of an expert. The degree of buyer inspection and the buyer's knowledge of a nonconformity should affect the enforcement of a representation as a warranty when buyer inspection is the most cost-effective method of discovering defects before the completion of a sale.\(^\text{132}\)

Where a good is purchased in a market in which a representation is made to the entire market and a buyer pays the market price, the buyer should be able to enforce an affirmation or promise as a warranty because it is one of the attributes for which she has paid, as have other buyers in the market.\(^\text{133}\) To negate the warranty solely because of inspection would frustrate the value of both the warranty and the benefits of inspection. If any inspection by a buyer precluded the establishment of a warranty, the incentive for buyers to perform simple, cost-effective examinations would be reduced or eliminated since inspection would be costly for the buyer both in terms of the resources devoted to the inspection and the lost value of the warranty. With a

\(^{131}\) See Sylvia Coal Co. v. Mercury Coal & Coke Co., 156 S.E.2d 1 (W. Va. 1967) (finding that a buyer who inspected coal before it was cleaned and delivered could not assert breach of express warranty since buyer relied upon its own inspection rather than seller representations).

\(^{132}\) This conclusion follows from our analysis of "warranties and insurance problems" supra, Part II.D, especially the analogy to the effect of an inspection of goods on the enforceability of an implied warranty of merchantability under UCC section 2-216(3). \textit{But cf.} General Elec. Co. v. United States Dynamics, Inc., 403 F.2d 933 (1st Cir. 1968) (refusing to apply § 2-316(3) to an express warranty).

\(^{133}\) See \textit{supra} notes 41-44, 50-51 and accompanying text (finding that market price reflects all attributes in the bundle and the bargain agreed to is for all attributes paid for).
disincentive for a buyer to inspect, buyer inspections would not occur. Without these buyer inspections, products with "obvious" nonconformities would be sold and then give rise to warranty claims, producing an inefficient use of resources since the sales should not have occurred or the warranty should have been negotiated in light of the nonconformities at the time of sale. Buyer inspection, in this sense, is a cost-effective method of quality control and should be encouraged.

The general rule that inspection does not preclude the creation of a warranty when the warranty is made to the market in general is subject to two exceptions. The first exception is designed to reduce the inefficiencies that arise due to asymmetric information, moral hazard and adverse selection. It provides the circumstances under which the buyer must disclose information to the seller or else with inspection the warranty will be unenforceable.

Whenever a buyer inspects a product before purchase and finds that the product under consideration does not conform to the seller's affirmations or promises, the buyer should be precluded from enforcing the claims as warranties unless the buyer makes the information known to the seller and the seller remakes the representations to the buyer. Such disclosure will prevent a misallocation of resources which would result from the sale of a nonconforming product when a buyer "snaps up a deal" in which a nonconformity can be discovered inexpensively. When the information is made available by the buyer, the seller and buyer can negotiate for the optimal arrangement. For example, they could provide for an acceptable substitute product, provide for the seller to cure the nonconforming product, adjust the price to reflect the actual bundle being traded, or forego the transaction.

The second exception is related to the first. It bars an affirmation or promise from being treated as a warranty where a buyer conducts an inspection but fails to exercise reasonable care in doing so and therefore does not discover a nonconformity. As discussed previously, buyers should have an obligation to conduct cost-effective pre-purchase inspections to avoid the costs associated with purchasing nonconforming products. Similarly, buyers should be precluded from enforcing representations as warranties when they fail to exercise reasonable care in conducting inspections because they could

134. See supra text accompanying notes 58-63.
135. See supra text accompanying notes 64-65 (discussing when a buyer's inspection, or failure to inspect, bars or precludes the buyer from asserting express or implied warranties under U.C.C. §§ 2-313 and 2-316(3) (1991)).
avoid larger losses in dealing with nonconforming goods by taking more care in inspection.\textsuperscript{136}

Buyer disclosure is required where the buyer is able to obtain the information cost-effectively. Inspection by a buyer, including an inspection utilizing the services of an expert, that does not uncover nonconformities precludes enforcement of a representation as a warranty only to the extent that the nonconformities should have been discovered with reasonable care.\textsuperscript{137} To the extent a normal, cost-effective inspection does not disclose a nonconforming condition, the inspection does not alter the enforceability of the warranty offered by the seller.\textsuperscript{138}

For an individually negotiated transaction, the question of whether inspection should prevent a representation from being treated as a warranty is more difficult. The affirmation or promise in such a transaction may either be one that the seller would make to the market as a whole or an idiosyncratic representation that would be valuable only to the particular buyer.\textsuperscript{139} Nonetheless, the consequences of inspection should be the same. The issue is whether the buyer is purchasing the seller's representation or buying the good without a warranty based on his own assessment of the product.\textsuperscript{140} In \textit{Sessa v. Riegle},\textsuperscript{141} the court indicated that a buyer of a race horse was not entitled to treat a seller's representation that the horse was "sound" as part of the basis of the bargain and therefore as an express warranty since the buyer relied principally, if not exclusively, upon his own agent's assessment of the horse to make the purchase decision.\textsuperscript{142} Contrary to

\textsuperscript{136} See \textit{supra} text accompanying note 65.
\textsuperscript{137} Inspection, even by an expert, may reveal only that all attributes appear to be present and that the product appears to conform to the seller's representations.
\textsuperscript{138} Cf. U.C.C. § 2-316(3)(b) (covering implied warranty for defects that an inspection would not have revealed).
\textsuperscript{139} See \textit{supra} part III (distinguishing affirmations or promises made to the market in general and those that are idiosyncratic in nature).
\textsuperscript{140} See T.E. Lauer, \textit{Sales Warranties Under the Uniform Commercial Code}, 30 Mo. L. REV. 259, 265-67 (1965) (stating that a buyer who conducts his own independent investigation of goods and buys based on his own judgment cannot establish the reliance requirement, but if the buyer then requests the seller's assurance as a precautionary matter, the representation would be a warranty).
\textsuperscript{141} 427 F. Supp. 760 (E.D. Pa. 1977), aff'd 568 F.2d 770 (3d Cir. 1978). The principal holding in the case is that the seller's representation was an opinion and therefore not an express warranty. \textit{Id.} at 765. The court further indicated that the representation might not be part of the basis of the bargain. \textit{Id. Accord In re Jackson Television, Ltd.,} 121 B.R. 790 (Tenn. 1990) (noting that a buyer may provide for an express warranty in its manifestation of assent).
\textsuperscript{142} But see O'Connor v. Judith B. & Roger C. Young, Inc., No. C-93-4547, 1995 WL 415138 (N.D. Cal. Jan. 30, 1995) (holding seller's representation that a horse was a grand prix horse and not an amateur horse is enforceable as a warranty even though buyer and agents conducted extensive prepurchase inspections); Keith v. Buchanan, 220 Cal. Rptr. 392 (1985) (ruling repre-
the court's indication, a buyer's reliance on her own expert's advice to verify the seller's representation that an attribute exists implies that the validity of the representation respecting the attribute was part of the basis of the bargain. A court's decision to hold a representation unenforceable can only be considered correct if there was a discount of the price indicating that the buyer was not purchasing a commitment from the seller.\textsuperscript{143} Allowing evidence of mere inspection to preclude a warranty would discourage inspections and result in products being sold with nonconformities that could have been discovered at the time of sale. In \textit{Sessa}, even if the buyer relied principally on his own agent in determining to buy the horse, he should have been treated as having purchased such a warranty if he paid the market price for a sound horse.\textsuperscript{144}

If through an inspection a buyer discovers, or through the exercise of reasonable care should discover, that the good does not conform to an affirmation or promise, the buyer should be barred from enforcing the representation as a warranty unless she discloses the nonconformity to the seller and the latter reiterates the representation. Again, the reasons are to avoid adverse selection and a misallocation of resources and cause the person with superior information to disclose it. The latter reason may be particularly appropriate for idiosyncratic affirmations or promises since the buyer may have lower costs in determining whether the product conforms to an affirmation.

\textbf{E. Experimental Products}

If a seller's affirmation pertains to an experimental product, a buyer should not, subject to the limitation set forth below, be able to enforce representations in a brochure that boat was seaworthy enforceable even though buyer had some experience with sailboats and his friend in the boat-building business inspected the boat and said it would suit his needs since the boat was inspected out of the water); City Mach. & Mfg. Co. v. A. & A. Mach. Corp., 4 U.C.C. Rep. Serv. (Callaghan) 461 (N.Y. 1967) (finding a seller’s representation, that a drill could obtain 1300 rpm enforceable even though plaintiff's employees inspected the machine and doubted the machine could obtain that speed, and a label on the side of the machine indicated its top speed was 358 rpm; dictum that if buyer knew it were false, the representation would not be a warranty).

\textsuperscript{143} See St. Charles Cable TV v. Eagle Comtronics, 687 F. Supp. 820, 829 (S.D.N.Y. 1988) (finding that representations could not have been part of the basis of the bargain where the buyer extracted substantial price concessions due to the experimental nature of the equipment purchased).

\textsuperscript{144} 427 F. Supp. at 765. Even in markets where heterogeneous products are sold, statistical tests can be performed to determine if a particular attribute is included in the market price. The most common area where this type of analysis is used is in local housing markets, both with appraisal data and econometric analysis. Thus, just because a transaction is individually negotiated does not mean that a market price will not capture attribute values which are not explicitly discussed and bargained for. See \textit{supra} Part II.B (discussing the pricing of the complex product).
the seller's representation about the product's attributes or performance as a warranty. In many cases, for experimental products no market price exists which incorporates the information of buyers and sellers about the products' attributes. Thus, the presumption that the market price captures the value of a seller's affirmations does not apply.

When market prices for close substitutes to an experimental product exist, even in markets where seller representations will ordinarily be enforced, seller representations for experimental products should not be presumptively enforced as warranties. The buyer should realize from the uncertain or experimental nature of the undertaking that the seller faces a substantial probability of being unable to produce the product despite expending an appropriate level of resources and does not have a comparative advantage vis-à-vis the buyer in providing the buyer with an appropriate remedy. Moreover, if representations concerning such experimental products were enforceable as warranties, sellers would expend additional resources to qualify representations and/or would make fewer representations to assure they are not treated as warranties, thereby decreasing the amount of valuable information available to buyers searching for such products. Where buyers know or have reason to know the experimental nature of the product, neither result is efficient. Under the circumstances, therefore, the seller's representation should only be considered a commitment to exert reasonable efforts to produce the good whose attributes are represented. If the seller exerts those efforts and fails, the buyer has obtained what he bargained for. Only if the seller's repre-

145. See United States Fibres v. Proctor & Schwartz, Inc., 509 F.2d 1043 (6th Cir. 1975) (finding that a representation that machinery would produce products of a certain thickness not part of the basis of the bargain when the parties knew that they were fabricating a piece of machinery that was an unproven process); St. Charles Cable TV, 687 F. Supp. at 829 (noting in dictum that representation that descramblers would have less than a 4% failure rate would not be part of the basis of the bargain since plaintiff extracted substantial price concessions from defendant because of the experimental nature of the goods); see also Murray, supra note 6, at 302-07 (noting that where representation pertains to an experimental good, the representation may be an objective to be obtained but not a commitment or warranty). But cf. Babcock Poultry Farm, Inc. v. Shook, 203 A.2d 399 (Pa. 1964) (finding sufficient evidence of warranty that experimental chickens would lay more eggs than other variety).

146. The remedies provided by the Uniform Commercial Code for failure to deliver the good would be the difference between the contract price and the market price or a price at which the buyer could obtain a substitute good on the market together with any consequential foreseeable losses sustained by the buyer. U.C.C. §§ 2-711 to 2-714 (1994). If the buyer accepts goods that fail to conform to the contract, including any express warranty, the buyer may recover the difference between the value of the good delivered and the value that it would have had had it conformed to the contract together with foreseeable consequential losses. Id. Of course the parties may provide for alternative remedies such as return of the purchase price, repair or replacement of nonconforming goods or liquidated damages. Id. §§ 2-718(1), 2-719(1).
sentation in the experimental or uncertain context makes clear that the seller was committed either to producing the product with the represented attributes, or to affording the buyer a remedy for the seller's failure to do so, should the representation be considered a warranty.\textsuperscript{147} Frequently, such representations may be made only on an individually negotiated basis and not to the market as a whole. Unless there is a manifest action providing the product with the attribute in question or the buyer with a remedy, or unless there is an explicit price adjustment to indicate that there is a warranty for the attribute in question, the price of the product will not include the representation of the seller as a commitment on the latter's behalf.

\textbf{F. Long-standing Prior Representations}

Another situation in which an affirmation, description or promise may not be an express warranty exists when the representation is made a substantial period of time prior to a buyer's purchase.\textsuperscript{148} A seller may, for example, conduct an advertising campaign claiming that his product will have a specified attribute. Substantially after conclusion of the campaign, a buyer purchases the product from the seller. The question is whether the claim made substantially prior to the purchase should be considered an express warranty. This issue is comparable to that which exists when an offer expires and can no longer be accepted by an offeree.\textsuperscript{149} That question depends on the terms of the offer.\textsuperscript{150} If the offer specifies when it expires, the offeree must accept prior to the end of that time.\textsuperscript{151} Similarly, if a seller specifies the period of time for which his representation applies to his goods or manifests that his representation applies only to a certain year's model of goods, the market will consider the representation to exist only for the goods specified. An individual buyer who purchases after that period therefore should be treated as having purchased

\textsuperscript{147} Babcock Poultry Farm, 203 A.2d at 399; see Overstreet v. Norden Labs., 665 F.2d 1286 (6th Cir. 1982) (concluding that veterinarian could rely on seller representations about new product to treat horses even though the veterinarian had some expertise); Butcher v. Garrett-Enumclaw Co., 581 P.2d 1352 (Wash. Ct. App. 1978) (holding that plaintiff who had considerable knowledge and experience with sawmills entitled to rely on representations regarding new unique mill which seller claimed could turn waste wood into valuable lumber and cut timber).

\textsuperscript{148} Vitro Corp. of Am. v. Texas Vitrified Supply Co., 376 P.2d 41 (N.M. 1962) (finding that representations in sales literature from a prior purchase are part of the basis of the bargain for instant transaction); cf. Murray, supra note 6, at 323 (noting that a representation made is enforceable as long as buyer can reasonably expect that it will be true at the time of purchase).

\textsuperscript{149} See Farnsworth, supra note 86, § 3.19 (discussing the lapse of an offer and the offeree's power to accept the offer).

\textsuperscript{150} Id.

\textsuperscript{151} Restatement (Second) of Contracts § 41(1) (1979).
without a warranty and should at a minimum inquire whether the representation is still effective. If an offer to enter into a contract says nothing about when it expires, it lapses at the end of a reasonable time, which is determined by the relevant circumstances surrounding the making of the offer and the attempted acceptance. For a representation alleged to be a warranty which does not specify when it expires, the question is whether the market still treats the claim as one of the product's attributes.

Enforcing a representation as a warranty after it is no longer part of the bundle of attributes being sold will cause a misallocation of resources. Buyers will purchase products that lack desired attributes and then will assert warranty claims against sellers. In response, sellers will increase prices to cover such claims, resulting in fewer products being purchased, and will include time limitations in some representations when for the seller it would be uncertain what the duration of the representations should be. The latter response would limit the flexibility of sellers in making affirmations or promises to the market.

One of the circumstances indicating whether a representation should still be deemed an express warranty is whether the market price for the good has shifted so that the representation is no longer part of the bundle of attributes being sold by the seller. This determination will be complicated somewhat in transactions where the price is individually negotiated. Even though the buyer may contend that he can prove he paid a price higher than that paid by others in the market, this proof may not be dispositive of the question whether he purchased a warranty. All it may show is that the seller captured some part of the consumer surplus the buyer would otherwise have retained, or that there may be other, new attributes about which the buyer is unaware. In this type of situation, the buyer should have to prove that the bargain between the parties expressly included the prior representation, for example, by showing that the two parties negotiated with respect to the representation and that it was included in the bundle of attributes for the product sold by the seller.

Other factors relevant to the question whether a representation should continue to be considered a warranty include the nature of the product and the extent to which its attributes, other than an express warranty, change over time. Also important is the relationship of the

152. Id. § 44.
153. Consumer surplus is simply the difference between the maximum price a buyer would be willing to pay for a product and the actual (market) price he paid. VARIAN, supra note 128, at 207-15.
parties. If the representation was made in a prior transaction but the seller continues to provide a remedy if the goods fail to conform to the warranty in subsequent transactions, a course of dealing may be established between the parties which makes the warranty part of the subsequent deals. The determinative issue is whether the market continues to treat the claim as one of the good's attributes.


155. Two cases from the Supreme Judicial Court of Massachusetts take conflicting positions on whether a prior representation can be considered part of the basis of a present transaction. In the first, Leavitt v. Fiberloid Co., 82 N.E. 682 (Mass. 1907), the plaintiff, who had purchased a material used in making combs, encountered difficulties with a batch of the material. Thereafter, one of defendant's agents guaranteed that in the future the material would be "all right." After a number of intervening purchases, the plaintiff purchased a batch of the material that caught fire. The plaintiff brought an action for breach of express warranty. The court held that the agent's representation which was made sometime between January and March applied to a sale of the material in October. The court reasoned:

Although no purchase was made at this time, it may fairly have been contemplated by the parties that this was a continuing offer of guarantee, and that whatever goods within a reasonable time were bought by the plaintiff of the defendant upon the strength of the statement would be protected by it . . . . It is not necessary that the giving of the warranty should be simultaneous with the sale. It is enough if it is made under such circumstances as to warrant the inference that it enters into the contract as finally made.

Id. at 684.

In the second case, Smith v. Denholm & McKay Co., 192 N.E. 631 (Mass. 1934), the plaintiff purchased a cream represented to remove bodily hair. On the first occasion on which she purchased the cream, a salesperson represented that the cream was safe and harmless. The plaintiff made two subsequent purchases within seven months of the first purchase, but there were no representations concerning the safety of the cream at the time of those purchases. The plaintiff applied the cream to her body throughout the period. She was hospitalized with neuritis derived from thallium poisoning, and the cream contained the poison thallium. The court reversed a trial court's ruling that the defendant had breached an express warranty to the plaintiff on the ground that the affirmation by the first salesperson could not apply to the subsequent sales for which no comparable representations were made. The court stated:

An affirmation of fact which is by statute made an express warranty cannot be held to extend to cover subsequent sales which are supported by valid consideration independent of the consideration which supported the first sale, and were made by salesmen who did not participate in the original sale and were without authority in fact to make any affirmation of fact by way of warranty.

Id. at 633.

The court distinguished Leavitt v. Fiberloid Co., on the ground that the parties contemplated continuing sales arising out of the original contract. The court's attempt to distinguish the Leavitt case is spurious. Under the standard used in that case, it appears reasonable for the plaintiff to have believed that the representation that the hair-removing cream was safe would apply to subsequent purchases until there was some change in the circumstances to indicate that the product lacked that attribute. If the price of the product had dropped substantially, for example, it may have been reasonable to conclude that the market had discovered that the product was not safe or harmless. On the facts presented, however, there is no reason to believe that the plaintiff or any other buyers were unjustified in believing that the cream retained the attribute of safety.
G. Post-contract Representations

In addition to representations made prior to or at the time of contracting, a significant issue is whether a representation made after parties enter into a contract should be enforceable as a warranty. Currently, Comment Seven to UCC Section 2-313 indicates that the time when an affirmation or promise is made is immaterial and that the important fact is whether the representation may fairly be considered part of the contract.\footnote{U.C.C. § 2-313 cmt. 7 (1994); see CLARK & SMITH, supra note 12, at 5 (finding post-sale representation enforceable as a warranty on the basis that the concept of bargain constitutes an ongoing business relationship or on the objective basis test that if the representation were made prior to the sale it would have been one upon which a reasonable buyer would have relied).} The comment then cites UCC Section 2-209 which allows modification of a contract of sale without consideration as a basis for treating a post-contract representation as a warranty.\footnote{U.C.C. § 2-313 cmt. 7 (1994).} In addition, at least one commentator favors treating post-contract representations as part of the contract because of perceived opportunity costs foregone by a buyer when the buyer receives the representation.\footnote{Murray, supra note 6, at 313, 321.}

From a market based perspective on how express warranties are created, both of these positions are overly broad and allow for what are in essence purely gratuitous promises to be enforced as warranties. Gratuitous promises may be enforced, but not as warranties. Enforcement should arise under supplemental principles of law, for example, estoppel under UCC Section 1-103.\footnote{See Bigelow v. Agway, Inc., 506 F.2d 551 (2d Cir. 1974) (finding that a plaintiff may recover for loss to his barn and hay after a fire occurred from storing wet hay in his barn pursuant to post-sale representation by manufacturer’s representative that hay could be bailed safely if treated with Hay Savor).} There are limited circumstances under which post-contract representations should be enforceable as warranties.

H. Representations Not Available Until After Contract Formation

In some instances a seller or manufacturer may not make an affirmation or promise available until after the buyer has entered into a contract of purchase. Frequently, these representations are found on the container in which the good is packaged. The buyer does not know of the affirmation, if at all, until the seller delivers the product.\footnote{From a market perspective, affirmations or promises that are not made available to a buyer until after parties enter into a contract are comparable to representations that are available prior to contract formation but ordinarily are not seen or read by many or most buyers until after the contract exists. As discussed earlier, the market provides for inclusion of such terms in
From a market based perspective of express warranties, the affirmation should not really be considered a post-contract representation. Although technically inclusion of the warranty in the parties' agreement might be considered a modification of an existing contract, the representation will already have been included in the product's price. Although the particular buyer and others may not have been aware of the term prior to purchase, the market as a whole probably acquired knowledge of the claim through repeat purchases by buyers who subsequently become familiar with such terms. Their knowledge of the term as part of the bundle of attributes being sold by the seller will be sufficient to include the representation as part of the deal.\textsuperscript{161} Refusal to enforce such representations would greatly increase transaction costs in situations where it is much cheaper simply to provide a representation on a package's container.\textsuperscript{162}

I. Options to Meet Changed Conditions

If the original bargain provides that such representations shall be treated as part of the contract, the representation should be treated as part of the deal. In this case, the buyer or the market had to pay for inclusion of this representation in the original contract. Along similar lines, a seller who has a policy of matching competitors' terms or of giving customers who bought products within a certain prior period new commitments offered to the market, should have its new commitment enforced. The seller has in essence sold the buyer a valuable the price of a product. See supra text accompanying notes 98-107 (discussing inclusion of accurate representations in product brochures and manuals and in product price). The only difference between those affirmations and promises and the ones discussed in this Section is the manner in which the law considers them to have become part of a contract. The representations that are made prior to conclusion of the contract may be considered part of the original bargain for exchange, whereas the representations that are made after the contract is formed may be perceived as contract modifications governed by UCC section 2-209.

\textsuperscript{161} The price of the representation probably is included in the product's market price even prior to the time that marginal buyers know the claim exists. A seller who wants to make a credible affirmation or promise that buyers can enforce will want the representation to be enforceable by even the first set of buyers. The seller must include an amount in the price to cover the expected costs of warranty claims from such buyers. Therefore, the price of the representation is likely to be included in the price for these buyers. Denying enforcement to these buyers would increase transaction costs by forcing sellers to negotiate individually with or apprise the buyers of the affirmation or promise. Only if the evidence establishes that the parties negotiated to sell the product at a price not including the affirmation or promise should the representation be treated not as a warranty.

\textsuperscript{162} For authority enforcing a representation on a container made available to the buyer after contract formation, see Marston v. E. I. du Pont de Nemours, 448 F. Supp. 172, 173 (W.D. Va.), vacated and remanded 580 F.2d 1048 (4th Cir. 1978). But see Schmaltz v. Nissen, 431 N.W.2d 657, 661 (S.D. 1988) (stating that affirmations on seed bags are not part of the basis of the bargain since they are not seen by buyer prior to conclusion of sale).
option at the time of entering into the original contract. The price of
this option will be included in the purchase price; hence, the option
will be part of the basis of the bargain.

J. Right to Revoke or Reject

When a seller extends a warranty to a buyer who has a right to
reject the goods for a nonconformity or to revoke acceptance because
of a nonconformity which substantially impairs the value of the goods
to him, the representation should be enforceable when it is part of an
agreement to induce the buyer to retain and pay for the goods. In this
situation, the representation is a new attribute which, together with
the nonconforming good, creates a bargain equal to the market value
of the original transaction.

K. Goodwill and Reputation

A representation should be enforceable when it is part of an im-
plicit exchange in which the seller seeks continued buyers’ goodwill
through continued purchases.\(^\text{163}\) From a market perspective, the seller
may desire to make an enforceable commitment to previous buyers to
assure they will return and not deal with competitors.\(^\text{164}\) If the post-
sale representation were not independently enforceable, the buyer
and seller would have to go through the deadweight cost of initiating a
transaction with another seller and then the initial seller providing the
warranty in order to retain the buyer’s patronage. These costs can be
avoided if the transaction is recognized as one in which the seller is
attempting to keep the buyer’s continued goodwill and the affirmation
or promise is enforced. Of course, if the seller or the context clearly
indicates that the seller’s post-contract representation applies only to

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\(^{163}\) Abex Corp. v. General Motors Corp., 741 F.2d 1235 (10th Cir. 1984) (holding that post-
contract representations to employees of the plaintiff were enforceable since they were made to
promote future sales with Abex). \(^{But~see~Hrosik~v.~J.~Keim~Builders,~345~N.E.2d~514~(Ill.~Ct.
App.~1976)~(holding~that~post-contract~representation~by~sellers~of~model~house~that~the~equip-
ment~would~be~warranted~were~not~part~of~the~basis~of~the~bargain~since~no~reliance~and~no~new
consideration);~Stang~v.~Hertz~Corp.,~490~P.2d~475~(N.M.~Ct.~App.~1971)~(holding~that~a~repre-
sentation~by~a~salesperson~to~the~plaintiff~who~was~renting~a~car~after~the~rental~agreement~was
entered~into~that~the~tires~were~good~was~not~enforceable~since~it~was~made~after~the~contract
was~entered~into).\)

\(^{164}\) Professors White and Summers would enforce post-contract representations in only lim-
ited situations, one of which exists when a purchaser has just purchased a good, has not yet
removed it from the store, and could, as a matter of business practice, return the good at the
time the seller made the post-sale statement. \(^{White~&~Summers,~supra~note~11,~§~9-5.\)~Al-
though~the~authors~appear~to~justify~enforcement~of~the~representation~on~business~practice,
we~would~do~so~under~our~model~when~it~is~reasonable~to~believe~that~the~representation~is~made
to~retain~the~buyer’s~goodwill,~which~would~probably~be~true~in~most~of~these~situations.\)
new purchasers or to newer models of the good, then the representation should not be enforceable by the original buyers as part of an implicit exchange to retain their goodwill.

L. Post-contract Limitation

A post-contract affirmation or promise need not be specifically bargained for\textsuperscript{165} or require new consideration given for it to be considered a modification of a previous contract under UCC Section 2-209.\textsuperscript{166} The representation would not be part of the basis of the bargain, however, unless at a minimum the affirmation or promise was implicitly given to retain the goodwill of the buyer.\textsuperscript{167} This limitation on what post-contract representations should be treated as warranties could be perceived as a limitation on the rule in UCC Section 2-209(1) that a contract for the sale of goods can be modified without consider-

\textsuperscript{165} But see Kwestel, supra note 71, at 1025-26. The author maintains that although there need be no consideration for a post-contract warranty, there must be a bargain between the parties and not simply a unilateral representation by the seller. See U.C.C. § 2-209(1) (stating that an agreement modifying a contract needs no consideration to be binding); see also Wurts & Summers, supra note 11, at 340 (noting that upon analyzing case law on both sides of the reliance issue, courts seem to retain the requirement by viewing affirmations using the “basis of the bargain” test). Although this approach appears to be consistent with the literal language of UCC section 2-209(1), which requires a mutual agreement for the modification of a contract, it imposes deadweight negotiating costs on the parties which are unnecessary since the seller can craft the language of his post-contract warranty in a manner that will avoid his inappropriately being subject to liability to buyers to whom he does not intend the warranty to extend.

\textsuperscript{166} U.C.C. § 2-209(1).

\textsuperscript{167} For a case that is compatible with the contract modification rule in UCC Section 2-209(1), that a modification of a contract needs no additional consideration to be binding, but that is inconsistent with our model requiring that there be an implicit exchange between the buyer and the seller to retain the latter’s goodwill, see Autzen v. John C. Taylor Lumber Sales, Inc., 572 P.2d 1322 (Ore. 1977). There the plaintiff entered into a contract to purchase a 50-foot boat from the defendant. After the parties had negotiated the terms of the deal, the seller offered to have the boat inspected. The buyer said that an inspection was unnecessary, but the inspection was conducted nevertheless. The person conducting the inspection reported that the vessel was clean, dry and well-ventilated. The inspection report was given to the buyer prior to taking possession of the vessel. Several months after taking delivery, the buyer discovered that the boat had substantial dry rot and sought to revoke his acceptance. The court held that the inspection report was part of the basis of the bargain since the concept of “bargain” is more extensive under the UCC than under the common law and the bargain was not completed at the time the representation was made since the buyer had not taken possession of the boat. Id. at 1325-26. Moreover, the court concluded: “While this description did not induce the actual formation of the contract, the jury might have found that it did induce and was intended by the Seller to induce Buyer’s satisfaction with the agreement just made, as well as to lessen Buyer’s degree of vigilance in inspecting the boat prior to acceptance.” Id. at 1326. This latter rationale and the court’s treatment of the representation is inappropriate under the test we propose for there is no reason to believe that the seller made the representation to retain the buyer’s goodwill since the seller was in the lumber not the boat selling business. Realistically, the post-sale representation was merely a gratuitous statement.
BASIS OF THE BARGAIN

V. False representations made before sale

As discussed previously, the market incentives for sellers to offer true representations as part of a product's bundle of attributes are strong. Nonetheless, false representations are sometimes made. The laws of fraud and misrepresentation and federal and state deceptive trade practices statutes regulate many of such claims. This Article's test for whether an affirmation or promise is an express warranty does not negate the application of those statutes or laws. Indeed, in this section the Article considers only those situations in which the seller makes a representation which at the time it is made the seller believes to be true, but which later is discovered to be false. False representation issues arise when a representation becomes false, is found to be false for a category of buyers, or is known by a buyer to be false at the time of purchase. This Article considers each of these possibilities below.

The same basic analysis as applied to true representations holds for false ones. If the price of the product bundle includes a payment for a claim and if the buyer does not know and could not through the exercise of reasonable care have known that the claim is false, the representation should be enforced as a warranty. If the buyer knows, or through the exercise of reasonable care should know, that the claim is false, then the representation should not be enforced. This exception to the general rule will provide the correct incentives for buyers to undertake cost-effective inspection and provide valuable information to the market. Thus, the inefficiencies of adverse selection, moral hazard, and "snapping up a deal," i.e., purchasing a good knowing a representation is false with the expectation of receiving a remedy, will be minimized. Once the market has adjusted the price of a product to reflect the absence of the claim, buyers can no longer enforce the rep-

168. Kwestel maintains that there may be no post-contract warranty modifying a sales contract if the contract has been fully performed on both sides. Kwestel, supra note 71, at 1028. For example, if the seller has delivered the good and has no continuing obligation with respect to it and the buyer has paid for the good, there is no contract remaining to modify under UCC section 2-209(1). Id. Under our model the seller could still make an enforceable warranty since his affirmation or promise with respect to the good would be given as part of an implicit exchange for the buyer's goodwill. It is this implicit exchange that our model would treat as the new contract between the parties.

169. See supra text accompanying section IV.B.


representation even if they erroneously believe that the representation or claim is still being made.

Whether affirmations or promises that a buyer knows or has reason to know are false should be enforced is disputed by courts and commentators. Some of the dispute is due to the lack of a clear definition of the term "false." Some of the disagreement arises as the result of conflicting desired outcomes—the insurance role of warranty law, efficiency concerns, and equity issues. Therefore, we first describe in some detail what we mean by a "false" claim and what efficiency issues need to be considered. Second, we indicate how our market based test would operate depending on the nature of the affirmation and the character of the falsity.

An affirmation or promise made by a seller can be false in a number of senses. In the "classical" sense, a false representation is one that is universally untrue. For example, a seller claims that a copier will produce 1,000 color copies per minute when, in fact, it is only capable of producing 100 copies per minute whatever the circumstances. Other than purposeful or negligent falsehoods, representations which are believed to be true at the time when made by the seller might become classically false as the result of either changed technology or information or due to the novelty and lack of market experience with a new product.

172. For authorities that a buyer knowing or having reason to know that a representation is false cannot enforce it as a warranty, see Galli v. Metz, 973 F.2d 145 (2d Cir. 1992); Royal Business Machs., Inc. v. Lorraine Corp., 633 F.2d 34 (7th Cir. 1986); United States Fibres, Inc. v. Proctor & Schwartz, Inc., 509 F.2d 1043 (6th Cir. 1975); Coffee v. Ulysses Irrigation Pipe Co., 501 F. Supp. 239 (Tex. 1983); Wendt v. Beardmore Suburban Chevrolet, Inc., 66 N.W.2d 424, 429 (Neb. 1985); Allied Fidelity Ins. Co. v. Pico, 656 P.2d 849 (Nev. 1983); Murray, supra note 6, at 294. For contrary authority, see Kwestel, supra note 71, at 1014.

173. See, e.g., RESTATEMENT (SECOND) OF CONTRACTS § 159 (1981) ("Whether a statement is false depends on the meaning of the words in all the circumstances, including what may fairly be inferred from them.").

174. Because a warranty provides a form of insurance to the buyer, problems related to moral hazard and adverse selection can arise impairing market efficiency see supra Section II.D. To foster efficiency, then, implies providing less insurance through warranties. However, less extensive or available warranties will increase search costs creating other efficiency problems. See, Section II.F, supra. Moreover, without some form of insurance through warranties product failures would leave the loss on the buyer, a possible unfair or inequitable outcome.

175. Our taxonomy of falsity is provided for expository convenience and analytical clarity. Other definitions of false statements or claims made to the market are certainly possible. The three cases we consider below, though, present what we believe are the most important situations of erroneous or false terms coming to the market through warranty representations.

176. An example of changed information resulting in a claim originally perceived to be true but subsequently found to be false may be found in Cipollone v. Liggett Group, Inc., 893 F.2d 541, 572 (3rd Cir. 1990).
A representation is false in a "probabilistic" sense when a seller makes a claim which is generally but not always true. A probabilistically false claim while true for most circumstances will not be true some of the time, but the time or circumstance at which the claim will be false cannot be easily (cost-effectively) determined. For some probabilistically false claims, sellers will offer a remedy, such as repair or replacement of a part(s) claimed to have an attribute which may not exist, as part of a warranty package. As long as the revenue received from buyers is greater than (or equal to) the cost to the seller of providing the remedy, the seller will offer probabilistically false claims to the market. It will be more efficient to offer these "false" terms than to expend (even greater) resources in an attempt to reduce or eliminate the "falsity." For example, an automobile seller may claim that a car has no defects, even though the seller knows that there may be some type of problem. The claim is false in the sense that for some cases a problem exists. However, the nature of the problem that will manifest itself is unknown (at least without expensive inspection and testing by the seller) at the time of sale. The cost for the seller to eliminate the defect (before the sale) will be greater than the cost of honoring the warranty.

A representation is "situationally" false when it is always or almost always untrue for one or some types of buyers or circumstances but true for all or most others. An example of situational falsity for a buyer or group of buyers is a claim by a detergent seller that its soap is "kind to hands" when the detergent causes a rash for a buyer or small group of buyers who suffer an allergic reaction to the product. The claim is false for the person(s) suffering the allergic reaction although it is true for everyone else. Because it may be too costly for a seller to identify the groups and users for whom the claim would be false, the seller will offer the general affirmation to the market. Although a buyer for whom the claim is false may not be able to enforce the warranty because the representation is interpreted as not applying to the buyer's particular situation, the seller may provide some accommo-

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177. Analytically with probabilistic falsity, a representation that a product is free from defects, for example, is false for at least some cases. However, the warranty can be true in the sense that it is a promise to provide a remedy for the discovered defect. Thus, the warranty is not false, but the "defect-free" representation is.

178. Spiegel v. Saks, 272 N.Y.S. 2d 976 (N.Y. App. Div. 1966) (ruling that a buyer is entitled to recover for breach of warranty that product was safe for removing age spots even though buyer's adverse reaction was idiosyncratic).

dation, e.g. a refund of the price, to the buyer for whom the claim is false in order to maintain goodwill, particularly with repeat buyers.

A. Probabilistically False Terms Offered to the Market

Claims which are made to the market and which are probabilistically false should be enforced except when a buyer knows or through the exercise of reasonable care should know of the falsity. The purpose of the warranty is to minimize the cost of search and inspection\textsuperscript{180} by providing information to the buyer. The warranty also provides the buyer with insurance against the consequences arising from the failure of the product to have the attribute warranted. The only way to determine product nonconformity is through product use by the buyer. In this sense, the buyer is the least-cost discoverer of the defect and is in the best position to learn of the nonconformity.\textsuperscript{181} Since the buyer paid for the insurance, since the insured against event occurred, and since the buyer took all cost-effective precautions to prevent the failure, the warranty should be enforced as promised.

An exception to the general rule of enforcing warranty claims that are probabilistically false exists when the claim will also be situationally false to a particular buyer and the buyer knows, or through the exercise of reasonable care should know, the claim is false. Thus, when a buyer knows, or should have known, that a warranty claim will be false in the buyer's circumstance, the buyer should make this information known to the seller. Not enforcing the term where the buyer is in the better position to avoid the losses resulting from the false claim will promote efficiency by reducing moral hazard and adverse selection problems.

\textsuperscript{180} See supra section II.F (discussing warranties and search costs).

\textsuperscript{181} In theory, sellers could always test for failure and defect. However, such testing might not be cost-effective. Some detection might require destructive testing or extensive testing which would reduce the value of the product to consumers, e.g., driving tires 30,000 miles to make sure they will not fail. Or the cost to sellers of testing and quality control might be greater than the expected loss from having to honor the claims of buyers under the terms of the warranty.
Individualized knowledge of the situational falsity of a representation which is made to all buyers in a market is important in two additional respects. First, although UCC section 2-601 adopts the perfect tender rule under which a buyer can reject a good for any nonconformity, section 2-608 permits a buyer to revoke his acceptance of a good only if the nonconformity substantially impairs its value to him. A buyer who entered into a contract to purchase a good, knowing that an affirmation or promise was false, might assert the ability to reject the good upon the seller's tender. Permitting such a rejection would be inappropriate for it would allow the buyer to enter a binding contract which he considers optimal even with the false affirmation or promise and then be able to renege on the transaction if for some reason unrelated to the falsity of the seller's claim the deal becomes disadvantageous. Not only would this result cause sellers to undergo unnecessary transaction costs in tendering nonconforming goods, but it would also force them to over-invest resources to assure that their representations are correct to protect themselves, through self insurance, hedging or otherwise, against such buyer behavior. When the buyer has accepted the good which he purchased with knowledge that an affirmation or promise was false, he should be precluded from being able to revoke his acceptance on the ground that the nonconformity does not substantially impair the value of the transaction to him.

A contrary result would cause sellers to engage in the protective behavior mentioned with respect to rejection and to over-invest resources in assuring that their representations are accurate. The buyer should be bound to pay the price for the good and be able to recover the difference between the good as warranted and the value of the good as received. If a buyer knows that a claim is false, either at the time of purchase or shortly thereafter, and continues to use the product, the principle of mitigation of damages in the common law and in section 2-715(2)(a) of the UCC indicates, together with the least-cost avoider principle of economics, that the seller should not be

182. But cf. U.C.C. § 2-316(3)(b) (1983) (permitting no recovery under an implied warranty theory for defects that examination ought to have revealed); Land v. Roper Corp., 531 F.2d 445, 448 (10th Cir. 1976) (no breach of warranty by seller where buyer made independent investigation and did not rely on seller's warranty).

183. See Kwestel, supra note 71, at 1014 (noting that under the common law of contracts a buyer who has antecedent knowledge that a promise or affirmation is false should not be able to avoid the transaction based on a material breach).


185. U.C.C. § 2-714(2) (1983) (providing that “[t]he measure of damages for breach of warranty is the difference . . . between the value of the goods accepted and the value they would have had if they had been as warranted”).
liable for consequential damages. If the seller is liable for such damages, there are substantial risks of adverse selection and moral hazard. People will purchase and use products they know present a substantial risk of injuring them because they are insured against such losses by the seller.

B. Situationally False Market Representations Known False to an Individual

An affirmation or promise may be offered in the market which is true for most buyers, but which is false in a particular circumstance. As hypothesized previously, a detergent seller may affirm to the market that its soap is "kind to hands." A buyer may purchase the detergent on a periodic basis and discover that the soap causes a rash on her hands. If the affirmation is interpreted to apply to the injury to the buyer's hands, she should not be able to enforce the claim if the buyer continued to purchase and use the product after she learned, or through the exercise of reasonable care should have learned, that the claim of kindness was false for her although it is true for others.

Not enforcing a claim after a buyer knows it is situationally false avoids a misallocation of resources, adverse selection, and moral hazard. It also provides an incentive for the buyer to convey information to the seller and to the market about the falsity of the representation. To be able to enforce the representation, the buyer should be required to disclose its discovery of the falsity of the representation to the seller, and the seller must remake the affirmation or promise. In the alternative, if the seller anticipates that a buyer will perceive a representation as "too good to be true" and assures the buyer ex ante that what appears to be false is true, the seller's affirmation or promise should be enforceable despite the buyer's perception of its falsity. Unless a seller is able to make an enforceable representation under such a circumstance, it will be difficult for the seller to create a

186. See Cipollone v. Liggett Group, Inc., 893 F.2d 541, 568 n.31 (3rd Cir. 1990) (indicating that buyer who believed representation was false could not recover consequential damages where such damages could have been avoided "without undue risk, expense, or humiliation").

187. But see Kwestel, supra note 71, at 1014 (arguing that a purchaser who knows that a representation is false prior to entering into a transaction should be able to enforce it despite that knowledge).

188. It is difficult to assert merely from the price at which the product is sold that the seller is continuing to adhere to the validity of its representation. Although the price may remain the same despite the discovery of the representation's falsity, it may be that the price has shifted for the value of the entire bundle of true attributes encapsulated in the good or that the seller is obtaining more of the buyer's consumer surplus.
market for a product where consumer skepticism of the product's attributes or performance is high.

C. Classically False Representations

Classically false claims arise when sellers offer representations about a product's attribute bundle which both they and buyers believe are true and the market price reflects the presence of the representation in the product bundle, but the attribute is not part of the bundle.\(^{189}\) This situation reflects an honest failure to know that the attribute does not exist. The law treats this situation as one of honest misrepresentation on the part of sellers.\(^{190}\) Since it is inefficient for buyers to inspect in detail every claim made by sellers, most buyers rely on the market to generate appropriate information about and pricing of product bundles. Similarly, it is cost-effective for sellers, after reasonable testing and quality control, to bring product bundles to the market without extensive, destructive, or absolutely complete testing.\(^{191}\) Since it is not efficient for either buyers or sellers to determine with absolute certainty the truthfulness of all claims and representations, it is possible for some product attributes, in this case affirmations or promises, to be offered and priced in the market incorrectly. A classically false claim is distinguishable from probabilistically and situationally false claims in the sense that the claim is not

\(^{189}\) As the Article discusses below, in Part V.C.1, classically false representations cause the market to move through three "phases." Only during the initial phase is it necessarily true that all buyers and sellers believe the representation to be true. Because all market participants behave as if the representation were true, the market price will include payment for the value of the representation. Once some participants discover that the representation is not true, the market will move to a second phase where adjustments to the market terms will occur. See infra notes 201-08 and accompanying text.

\(^{190}\) Restatement (Second) of Contracts § 164 ill. 2 (1981); Restatement (Second) of Torts § 552C (1977); see generally Alfred Hill, Damages for Innocent Misrepresentation, 73 Colum. L. Rev. 679 (1973).

\(^{191}\) Suppose it would take an additional $200 for a seller to conclusively inspect or test a product to insure that a representation is true. If the seller believes, after a given amount of testing, that the probability of a claim being brought due to the representation's failure is one in a hundred (one percent of the time) and that the value of satisfying the claim (when it does in fact arise) is $500, then the expected value of the claim is only $5. In this situation it would be inefficient to require the seller to make the $200 expenditure to save only $5. Inspection in this case would be inefficient. This argument follows the traditional Learned Hand negligence standard in tort law: to avoid liability it is necessary to expend resources on care only up to the point where the cost of care would equal (or be less than) the benefit of exercising care (the probability of a loss times the value of the loss). See United States v. Carroll Towing, 159 F.2d 169, 173 (2d Cir. 1947) ("If the probability be called P; the injury, L; and the burden, B; liability depends upon whether B is less than L multiplied by P: i.e., whether B < (PL)\). The difference here is that the seller is generating information about the representation's truthfulness through testing, not investing in safeguards or behavioral changes to avoid an accident. However, the economic analysis is exactly the same from an efficiency perspective.
false just for some buyers or under some circumstances but is false for everyone all of the time.

One way to conceptualize a classically false representation is as a mistake or accident. As is the case with any accident, loss and "injury" occur. The loss consists of the value of the attribute for which the buyers paid but which they did not get, together with any other consequential loss such as personal injury. To push the analogy with accidents a bit further, the seller may not have been negligent, nor was there contributory negligence on the part of the buyer. This, indeed, is the case of "pure" accident. An efficient rule for enforcing warranty claims in the case of classical falsity should provide incentives to reduce the number of classically false claims to the optimal level, minimize the costs from adverse selection and moral hazard, promote the flow of true information to the point where it has the highest value in terms of eliminating the classically false representation, and prevent excessive proof and transaction costs. When a situation of classical falsity arises, the market will move through three distinct phases. During the first, original phase, buyers and sellers will believe the representation is true, and the market will price the product accordingly. Thus, buyers will pay for an attribute which they do not receive, and sellers will be compensated for providing an attribute which is missing from the product bundle. In the final, completion phase, the market will have adjusted to the true information that the attribute is not in the bundle, buyers will not pay for the attribute, and sellers will not offer the affirmation or promise in the market. The intermediate or detection phase is that period of time during which the information that the attribute is missing becomes known to at least some buyers and some sellers but before the price completely adjusts to the new information. In the detection phase, then, some buyers will be paying for an attribute that is missing, some sellers will not realize that the product being sold lacks the attribute, and the market price (at least in part) includes a payment for the false claim. The longer the time for the initial and detection phases, the higher the costs from

192. Under the law of misrepresentation an innocent, nonnegligent misrepresentation may be based on mistake. Restatement (Second) of Contracts §§ 159 cmt. a, illus. 1, 164 cmt. b, illus. 2.

193. U.C.C. §§ 2-714 & 2-715. Section 2-714 provides for the difference between the actual value of the goods as delivered versus what the value would have been had the goods been delivered as warranted. Section 2-715(2)(b) specifically provides recovery for personal injury.

194. Classically false representations can also arise due to negligence on the part of the seller as when the seller fails to perform tests or research which should have cost-effectively been done.
resource misallocation. In the initial phase, both buyers and sellers are making mistakes. Buyers will suffer from "product disappointment" and possible consequential losses. Sellers will incur high claim costs or lost goodwill from disappointed customers. Costs will be reduced to some extent during the detection phase as some buyers and sellers realize the truth about the falsity of the representation and the price partially adjusts to exclude an amount for the false representation. Losses will still occur and inefficient trades will take place. For efficiency reasons, therefore, legal rules are needed to reduce the amount of time it takes to move from the initial phase to the final, completion phase. Once the market reaches the completion phase, buyers get what they pay for, sellers no longer make untrue representations, and the market price accurately reflects the value of all the attributes in the product bundle. Because of the different information available, behavioral incentives, and market pricing in each of the three phases, we consider the application of our market based rule for warranty enforcement in each phase separately.

1. Initial Phase

In the initial phase buyers pay for something which they do not get; sellers believe they are selling an attribute and receiving appropriate compensation through the market price. Not even marginal buyers, during this phase, have enough information to deduce that the representation is false. Sellers expect to incur costs for warranty claims only to the extent that the claims are probabilistically false and believe that the payment for providing the term will cover their expected costs from claims.

Warranty claims during the initial phase should be enforceable, subject to the exceptions for singular falsity and representations that buyers should discover to be false through the exercise of reasonable care. Enforcing claims, when false, will increase seller costs and provide a clear signal to sellers that what they thought to be true is in fact not true and result in sellers either modifying their products or removing their claims from the market. Since detailed inspection and testing by either the buyer or seller would not generate better information in a cost-effective manner (if it had, it would have been done already), the

195. These costs include, obviously, the transaction costs of buyers bringing warranty claims to sellers for a remedy. In addition, for buyers whose losses are not large enough to merit making a claim, they suffer losses from not having the missing attribute, including the cost, perhaps, of obtaining a replacement. Sellers who respond to claims incur costs for providing the remedies and dealing with disappointed customers. Finally, society suffers the deadweight loss of allocating resources to the production of a product beyond the optimal level.
least-cost way to inform the seller that the attribute is absent from the product bundle is by allowing buyers’ claims to be enforced. Buyer experience with the product will provide information about the missing attribute. By allowing buyer claims to be enforced, sellers will experience claim costs in excess of what sellers received in payment for the missing attribute from buyers. The excessive claim costs will provide sellers with the incentive to inquire into the causes for the excessive claims through market research, to devote more resources to inspection, which now become cost-effective, and, if adjustments to eliminate the problem cannot be made in a cost-effective manner, to alter the attribute bundle or market price.

Refusal of buyer warranty claims when representations are false would reduce the value of information signals (from the availability of a warranty) in the market and lead to a misallocation of resources. Buyers would discount substantially (possibly to zero) the value of representations which they did not know were true. For buyers to value representations ex ante, they would have to inspect excessively to determine the truthfulness of representations. Ascertaining the truthfulness of representations would confirm the value of sellers’ signals when they are true. But their value as signals when true would be the only value of the representations. The value in providing buyers with an enforceable claim about the existence of product attributes would be destroyed since buyers could not bring a claim if a representation were false. Since providing such a claim is the central function of a warranty in most instances, buyers would pay much less, in probably many situations nothing, for seller representations. With a decline in the amount that sellers received for offering representations, sellers would reduce the number of representations to the market. Given

196. During the initial phase the sellers’ information was incorrect, but this was unknown. That is, sellers believed that the representation was true and that claim costs (arising for probabilistically false reasons) would be less than or equal to the revenue received by including the attribute in the product bundle. The correct information is that the representation is false. Sellers now find the claim costs rising above their prior estimates. Originally sellers did not spend $200 to investigate an attribute’s truthfulness to save an expected $5 in claim costs. However, now the number of claims exceeds what was expected. Rather than a $500 claim occurring one in one hundred occasions, claims might be running at 50%, one half of the buyers returning with a claim. Given this new data about the occurrence of claims, the sellers will revise their expected claims costs to be $250. Now it will be efficient and profitable for sellers to spend $200 on additional inspections.

197. Assuming that buyers at this stage believe the claim to be true and are paying for the representation, they should only undertake cost-effective inspections.

sellers' and buyers' preferences for express warranties, they will be underproduced.

Arguably, allowing buyer claims to be enforced would seem to increase the problems of adverse selection and moral hazard, leading to additional resource misallocation. Such problems will not, however, increase. Since both buyers and sellers during the initial phase believe the representations to be true, no one has any additional incentive to purchase or use the product more intensively other than in the way that would occur if, indeed, the representation were true. In all cases with insurance, moral hazard and adverse selection problems exist. But, enforcing claims for what are believed to be truthful representations will not exacerbate the problems.

A second argument against enforcing the claims during the initial phase is that if claims were denied, buyers would have an incentive to bargain for a lower price which would accurately reflect the actual attributes in the bundle. For this argument to have compelling force, one must assume that buyers can influence pricing adjustments more rapidly than can sellers and that buyers will obtain information about the falsity of representations more quickly than will sellers. The former is not likely to be true, since most often sellers control the offering price decision, market the product, and determine what attributes are included. Moreover, there is no reason to believe a priori that sellers will decide the best solution is to reduce the price (or that buyers will value this option the most). It could be more efficient to redesign the product, provide alternative attributes to replace the missing one, or otherwise modify the product to meet the desires of buyers. The incentive to explore these alternative solutions would be reduced if buyer claims were not enforced. If warranty claims are not honored and buyers learn claims are denied, they will have little incentive to bring the problem of the missing attribute to the attention of sellers and reduced incentives to inform other buyers. Thus, it will take longer for the information about the falsity of the representation to reach the sellers. Until the sellers realize the problem, adjust the

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199. In most product markets buyers cannot influence prices more quickly than can sellers. Sellers actually “set” prices in the sense of placing an offering price on the product. Buyers influence the price by choosing to purchase or not at the seller’s stated price. The seller learns if the posted price is correct through observing buyer behavior, lowering the price when inventories accumulate beyond desired levels, and raising the price when inventories are depleted more rapidly than desired. In this sense, sellers actually “watch” buyers and the sellers collect the information to alter prices. The main exception to this form of market pricing is the auction where buyers actually call out the prices to consummate a transaction. In this price setting environment, buyers “watch” sellers and adjust the price accordingly. However, we view these “auction-type” markets as the exception, not the rule.
price, or alter the bundle, mistaken sales will continue. As a result, the losses to buyers will increase with no benefit to society, a clear deadweight welfare loss.

2. Detection Phase

The detection phase begins when information about the falsity of the representation begins to reach the market and has an impact. The impact can be either a price adjustment to reflect the missing attribute or a change in the attribute bundle or both. The detection phase continues until the adjustment is complete. Complete adjustment occurs either when the price of the product no longer includes a payment for the false attribute because the attribute is no longer affirmed or promised by sellers or when the attribute has been changed so that the false representation is eliminated and the market price reflects an attribute bundle buyers and sellers accurately believe is true. During the detection phase the representation is still being made by some, if not all, sellers. The representation is still false to all, and some buyers and sellers have obtained knowledge of the representation's falsity. As a result, the market terms (product price, attribute bundle, or affirmations) have begun to reflect the information concerning the representation's falsity, but all adjustments have not been completed. Some buyers will purchase the product believing the representation to be true when it is false, some sellers will offer the term believing it is still true, and the price paid for the claim will be less than in the initial phase when all parties believed the representation to be true.

While the market is adjusting to the new information about the falsity of the representation, there will be a period of time when buyers may not be aware that the representation is false. Moreover, during this adjustment period the price of the product will also be changing to reflect the new information provided to the market about the falsity of the representation. The question is how to treat buyer warranty claims during this adjustment period.

The individual buyer who knew or through the exercise of reasonable care should have known that a claim is false should not be allowed to enforce the claim as a warranty in order to minimize the costs from adverse selection and moral hazard and to reduce the risk of loss according to the least-cost avoider principle. When, on the other hand, the buyer neither knew nor should have known of the

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200. Not all buyers and sellers need have complete information about the correct attribute bundle. See infra text accompanying notes 208-09 (noting sellers that do not have such information will be driven from the market, leaving behind those sellers who have complete information and eliminate any falsehoods).
falsity and paid for the attribute, the affirmation or promise should be enforced as a warranty since the buyer's position and the representation are equivalent to what they are during the initial phase.\textsuperscript{201} Enforcement will raise claim costs for sellers so they will have an appropriate incentive to perform the optimal amount of testing and inspection. Additionally, by enforcing claims buyers will not have an incentive to undervalue uncertain claims, engage in inefficient inspection, or incur excessive bargaining costs.

A buyer may not have known that a representation was false but may have paid a price that did not include an amount for the representation since the market had adjusted for information revealing the falsity of the information. In this situation the question whether the buyer should be able to enforce the representation as a warranty is a difficult one. On the one hand, enforceability might be denied since the price of the affirmation or promise is not included in the product's price and there is no harm to the buyer in the form of paying for an attribute which he did not receive. On the other hand, the buyers who do not realize that the price does not include the representation will suffer disappointment when they discover that the claim that they thought was enforceable is not. Additionally, these buyers could suffer real costs through having to find replacement goods possessing the missing attribute or through incurring consequential losses.\textsuperscript{202}

From an efficiency standpoint, the representation should not be enforceable as a warranty at least with respect to the buyer's direct economic loss. Since the price does not include a payment for the representation, marginal buyers (and sellers) have recognized the representation's falsity, and the product price (or bundle) has adjusted. Enforcing the warranty would signal marginal buyers that the bundle

\textsuperscript{201} There is no reason to expect additional adverse selection or moral hazard problems when the warranty is enforced when a buyer neither knows nor has reason to know that a representation is false. In addition, enforcing the warranty term when the buyer does not know of the falsity prevents the incentive for buyers to undertake inefficient inspection costs. Of course, the buyer has paid for the attribute and the representation. The most efficacious way to generate the information sellers need to discover the falsity of a representation is for the buyer to retain an enforceable warranty claim. See supra text accompanying note 196 (enforcing representations that are false increases seller costs and provides a clear signal that a claim is not true).

\textsuperscript{202} The consequential losses could consist of injury to person or property or commercial losses. For injury to person, a buyer who could not recover for breach of warranty probably would be able to recover on a strict liability basis for misrepresentation. See supra note 99. If the representation were enforceable as a warranty, a contract provision excluding liability for personal injuries would be prima facie unconscionable, whereas a provision excluding commercial loss would not. U.C.C. § 2-719(3) (1983). Given the ubiquitous nature of provisions excluding commercial consequential losses, the enforceability of an affirmation or promise which is not included in a product's price will in many instances not affect the buyer's ability to recover for such losses.
still includes the term, even though the price has adjusted. Buyers would get something of value (the warranty) for which they made no payment until all sellers removed the representation from the market, a process which might take a considerable period of time. The value of marginal buyers bringing information to the market will be frustrated since the law would continue to respond as though the representation were still part of the bundle of attributes being sold. In addition resources will be misallocated since buyers will purchase too much of the product because of the continued ability to enforce the representation, and society will suffer deadweight losses from enforcing the representations.203

On the other hand, a buyer who proved that he subjectively relied on a representation even though it was not included in the price might be able to recover for consequential losses resulting from such reliance. Although the buyer should not recover for direct economic loss as discussed in the prior paragraph, recovery for consequential loss based on reasonable reliance is appropriate to convey information to the seller to remove the false representation from the market. In this situation, where the buyer does not know of the affirmation’s falsity nor should know of it through the exercise of reasonable care, the seller is the least cost avoider of the consequential loss and should be liable for it. To recover, however, the buyer should have to prove reasonable reliance on the affirmation since the representation is not included in the bundle of attributes being sold and the action is basically one for misrepresentation.

Finally, there will be instances where buyers purchase the product believing the representation to be true but pay a price which is lower than in the initial phase but still includes some value for the representation. Here the representation should be enforced as a warranty to provide appropriate incentives for sellers to conduct appropriate testing and to reduce the incentives for buyers to discount excessively seller representations and engage in inefficient inspections. It might be maintained that a buyer’s remedy for breach of warranty should be limited, however, based on the amount paid for the representation in order to accurately reflect the value of the buyer’s bargain.204 Under

203. The price is clearly below the old (initial phase) market equilibrium. Thus, the amount buyers will be willing to purchase will exceed the amount sellers would like to sell. This will cause the price to rise back to the original level—the price with the false claim valued as if true.

204. UCC Section 2-714(2) provides that a buyer is entitled to the difference in value between the goods as warranted and as accepted by the buyer unless special circumstances show damages of a different amount. If the market has discounted the price because of information about the falsity of the warranted attribute, one could argue that, absent other circumstances such as a shift in the value of the good in the market, the discounted price represents the value of the good as
UCC section 2-714 the measure of damages for breach of warranty is the difference in value between the goods as accepted and the value they would have had if they had conformed to the warranty unless there are special circumstances establishing damages of a different amount. Ordinarily, a buyer who accepts a nonconforming good is entitled to the entire difference in value between this good and a good with the warranted attribute. If, however, evidence establishes that the amount of damages to the particular buyer is not the same as this difference in value, damages are to consist of this other amount. Where the price for the warranted attribute has been discounted based on some perception of its falsity in the market, the remedy might be restricted to the difference in value of the good without the attribute and the good with the discounted value of the representation in the market because that amount reflects the loss of the buyer's actual bargain and provides an appropriate incentive for the seller to minimize the loss of this bargain to the buyer. A difficulty with such a remedy is that it would be costly to administer because it would be necessary to ascribe a value to the good with the discounted warranty, unless this amount were simply restricted to the purchase price. Moreover, this value would vary over time as more information is acquired about the representation's falsity. A further basis for allowing a buyer the full recovery authorized by UCC section 2-714 is that the

warranted instead of what the good would have been worth if there had been no discount for the false affirmation or promise. Cf. John O. Honnold et al., Cases, Problems, and Material on the Law of Sales and Secured Financing 96 (1993). Suppose that a good sells for $1200 because of some information about the falsity of a warranty about one of its attributes. A buyer purchases for that price and discovers that the good lacks the warranted attribute, does not reject or revoke acceptance of the goods, but seeks the remedy provided by Section 2-714(2). The value of the accepted good without the attribute is $1,000. The value of the good with the attribute is $1,500. Under the restricted remedy discussed here, the buyer would receive $200, the difference in value between the discounted price and the value of the good as accepted and not the difference between the value of the good with the warranted attribute and the value of the good as accepted, or $500.

205. Compare Chatlos Sys., Inc. v. National Cash Register Corp., 670 F.2d 1304, 1306 (3rd Cir. 1982) (reasoning that the value of a good as warranted by the seller includes the benefit of a particularly favorable contract price) with Melody Homes Mfg. Co. v. Morrison, 502 S.W.2d 196, 202 (Tex. Ct. Civ. App. 1973) (stating that the value of a good as warranted is not restricted by contract price but is determined by the market value) and Andrew M. Baker et al., Article Two Warranties in Commercial Transactions, 64 Cornell L. Rev. 30, 113-115 (1978) (arguing that the contract price is not dispositive as to the value of the goods). See generally White & Summers, supra note 11, at 364-68.

206. See Alafoss v. Premium Corp. of America, 599 F.2d 232, 237 (8th Cir. 1979) (finding damages for nonconforming goods were restricted when the buyer would have had to sell leftover goods at a discount even if the goods had conformed to the warranty).

207. For an argument that a buyer's remedy for breach of warranty under UCC Section 2-714(2) should be based on the purchase price paid as establishing the value of the goods as warranted, see Chatlos Sys., Inc., 670 F.2d at 1307 (Rosen, J., dissenting).
proposal to restrict recovery does not provide for a buyer's cost of obtaining a substitute good with the attribute, and the seller should bear this cost to have an appropriate incentive to provide the good with the warranted attribute.

One additional issue concerning the enforceability of a representation arises during the detection phase. During the detection phase, it may appear that the same product is offered on the market at two different prices. Sellers who have not adjusted to the falsity of the claim will still offer the product at the higher price believing the claim is true. Those sellers who have learned that the representation is false will adjust by lowering the price (or substituting new attributes of equivalent value) and not making the representation. Buyers who purchase from the former will be able to enforce the claim, while buyers from the latter will not, an apparent differential treatment. In fact, however, there is no differential treatment. The two sellers are offering two different product bundles, one with and one without the representation at two different prices. Each bundle is a separate product in the same sense that any two bundles represent different products to the extent that the attributes are different. The bundle with the representation is as different from the bundle without the representation as a car is different from a tractor. Hence, there is no inconsistency in differentiating between the claims of buyers of the two products: the buyers with enforceable claims have paid for them, and those without claims will have paid less for a different product that does not include the affirmation or promise.

By basing enforceability on sellers' response to the falsity of a representation, this rule will reward those sellers who adjust rapidly and eliminate the classically false representations. Sellers who continue to make the representation will experience higher costs than those who learn the truth about the representation since claim costs will exceed the amount that buyers will pay for the representation.

3. Completion Phase

The rules articulated above for warranty claims during the initial and detection phases provide a cost penalty to sellers who do not learn that the representation is classically false. Sellers who do not learn and do not withdraw the representation will have to continue to honor warranty claims, the cost of which will exceed the price derived from selling the false representation. Because of this increasing cost
and a shrinking market,\textsuperscript{208} sellers who do not learn that an affirmation or promise is false will be driven from the market. Thus, eventually, the only sellers left will be those who know of the classical falsity and have responded by eliminating the representation. At this point the market will have reached the completion phase.

The completion phase exists when all remaining sellers have ceased offering the false representation and the market price has adjusted to reflect the changed bundle of attributes. The completion phase does not require that all buyers have knowledge of the falsity. However, enough buyers know to change the market conditions as indicated above.\textsuperscript{209}

Once the completion phase is reached, therefore, the representation is not included in the product bundle, and buyers are not paying for the representation. Thus, any claim brought by a buyer should not be enforced. Buyers only receive what they pay for, no more and no less. Early in the completion phase some buyers may be disappointed in the sense that they may still believe the product has the representation and that they paid for the attribute. Since the attribute is missing, they will bring a warranty claim and lose.

\textbf{D. Idiosyncratic Representation Known to be False by Buyer}

If a buyer knew, or through the exercise of reasonable care should have known, that an idiosyncratic representation made to the buyer was situationally false, the buyer should be precluded from enforcing the representation as a warranty. Enforcing the representation would not provide any incentive for the buyer to discover and reveal valuable information to the seller, thus preventing an erroneous representation with its attendant consequences. As in mistaken bid cases,\textsuperscript{210} the buyer should be precluded from "snapping up" the mistaken representation which he knows or has reason to know is false.\textsuperscript{211} A buyer should have an incentive to inform the seller of the mistake and avoid any loss therefrom. Not enforcing the claim would provide an appro-

\begin{itemize}
\item \textsuperscript{208} Marginal buyers will not purchase from sellers who continue to offer the classically false claim because they are the ones who should know of its falsity and will be denied the enforcement. Also, some non-marginal buyers will be responsive to the lower price available from sellers who have removed the representation and purchase from them rather than the higher priced sellers.
\item \textsuperscript{209} The ways in which the market can adjust to knowledge of the falsity of a representation include: price adjustment and removal of the false term, provision of new term for the false one, or product redesign.
\item \textsuperscript{210} United States Fibres, Inc. v. Proctor & Schwartz, Inc., 509 F.2d 1043 (6th Cir. 1975).
\item \textsuperscript{211} See Murray, \textsl{supra} note 6, at 294 (stating that a buyer who knows that a representation by a seller is untrue has no expectation that goods will reflect the representation).
\end{itemize}
appropriate incentive for the buyer to exercise care in avoiding misallocations of resources through the use of erroneous promises or affirmations and to provide correct information to sellers. In addition, to avoid adverse selection problems, the buyer should not be allowed to enforce the representation. Where the affirmation or promise is idiosyncratic, it is particularly appropriate for the law to provide such incentives since the buyer probably has better access to the information about a representation’s falsity than when the claim is not idiosyncratic.

If the law treats the false representation as unenforceable, the buyer will not pay for the seller’s claim, and it will be excluded from the deal. If a buyer tells a seller that a representation is false and the seller reaffirms the representation, the buyer should be able to enforce the warranty to enable the parties to obtain the warranty terms they perceive as mutually beneficial. Moreover, there is no adverse selection problem if the seller decides to reaffirm the representation since the seller can choose not to recommit itself if it considers adverse selection a risk of making the reaffirmation.

E. Expert Buyer

The inability of a buyer to enforce a singularly false representation as a warranty is particularly appropriate when the buyer is an expert who knows or through the exercise of reasonable care should have known that a representation is false. An expert buyer probably can acquire information about a representation more cheaply than a non-expert buyer and may likely have a comparative advantage vis-à-vis the seller in discovering a representation’s falsity. The expert buyer should have an incentive to convey to the seller, and thereby to the market, correct information about the product and its attributes. Unlike circumstances in which an expert should not be required to reveal to a seller information about positive product attributes, the buyer is not using his expertise to move the good to a higher and better use. Moreover, his inability to enforce as a warranty a representation he knows is false should only minimally discourage his acquisition of expertise by denying any remedy for breach. Finally, providing an in-

212. Id. at 295 (stating that the expert buyer who examines the goods cannot reasonably rely on the seller’s representations as to the quality of the purchased goods).

213. See Anthony T. Kronman, Mistake, Disclosure, Information, and the Law of Contracts, 7 J. LEGAL STUD. 1 (1978) (arguing that an expert buyer should not have to reveal to the seller positive information about product attributes where the information is the result of a deliberate and costly search, but the buyer may have a duty to disclose such information if it is casually acquired).
entive to disclose the falsity of the representation prior to purchase is a less costly manner of avoiding the deleterious consequences of such a representation than allowing the expert to obtain a remedy against the seller.

When the expert cannot enforce the representation as a warranty, the expert will not pay a price for the product that includes the value of the representation and, therefore, will have an incentive to reveal this information to the seller. Not allowing warranty enforcement in this case will substantially reduce the problem of adverse selection. The expert will have no incentive to purchase a product that he knows is unsuited for his needs and cause him direct economic loss which he should not have incurred.214

VI. DRAFT REVISION OF SECTION 2-313 AND THE MARKET TEST

The January 1996 draft of section 2-313 eliminates the basis of the bargain requirement and provides that any seller affirmation or promise that is made or furnished to a buyer and that relates to the goods becomes part of the agreement between the buyer and seller and is an express warranty unless the seller proves that a reasonable person in the buyer's position would conclude that the representation did not become part of their agreement.215 If, however, a seller makes an affirmation or promise to a remote buyer216 via a medium of communication to the public, the buyer must prove that he or she was reasonable in concluding that the representation became part of the agreement deemed to exist between the seller and buyer.217

In treating all seller representations about the goods, except those affirmations or promises made to a remote buyer through a communication to the public,218 as part of the parties' agreement and as express warranties and placing the burden on a seller to establish that a reasonable person in the buyer's position would not conclude that a rep-

214. The preclusion of the enforcement of a warranty by an expert buyer who knows or through the exercise of reasonable care should know that a representation is false exceeds the rule in UCC Section 2-715(2)(a) which precludes a buyer from recovering for losses that he could reasonably have avoided. Preclusion from enforcing the representation as a warranty results in the buyer being unable to recover for direct as well as consequential losses, a result which is appropriate when the buyer could have avoided the direct economic loss through utilizing the knowledge he possesses or exercising reasonable care in discovering the falsity of a claim.

217. See U.C.C. § 2-313(b)(2) (Proposed Draft January, 1996). The Reporter's Notes to this section state that although there is no agreement in fact between the seller and remote buyer, there is "a bargain of sorts" between the two that is "created by and enforced under Article 2." Reporter's Note 5 (1996).
representation was part of the agreement, the draft of section 2-313 takes
an approach similar to that advocated in comment 3 to the existing
section 2-313. According to that comment, once a buyer proves a rep-
resentation has been made relating to the goods, the burden is on the
seller to prove that it is not part of the deal.\textsuperscript{219} The Reporter's Note
to the September 1993 draft of section 2-313 indicated that a seller
could discharge its burden of establishing that a buyer was unreason-
able in concluding that a representation was part of an agreement by
proving that the buyer was unaware of, did not believe, or otherwise
did not rely on the representation.\textsuperscript{220} Similarly, the Reporter's Note
to the October 1995 draft stated that a seller could rebut the presump-
tion of a warranty by proving that the buyer either was unaware of or
did not believe the representation or relied upon the skill and judg-
ment of a third person.\textsuperscript{221} Moreover, the Reporter's Note to the Oc-
tober 1995, draft stated that there was no requirement that a buyer "as an initial matter" prove reliance on a representation to create an ex-
press warranty,\textsuperscript{222} implying that a proof of reliance might be relevant
rebutting the presumption that the representation was part of the par-
ties' agreement. The Reporter's Notes accompanying the 1996 draft
of section 2-313 do not discuss the manner in which a seller can estab-
lish that a reasonable person in the buyer's position would not reason-
ably conclude that an affirmation or promise became part of their
agreement. But, other than eliminating the language that a seller's
affirmation or promise relating to the goods is "presumed" to be part
of the parties' agreement, the 1996 draft of the section has not
changed the substance of the provision requiring the seller to prove
that a reasonable person in the buyer's position would not conclude
that such a representation were part of the agreement, making it rea-
sonable to believe that no changes were intended in the factors which
a seller can utilize in proving that an affirmation or promise was not
part of an agreement.\textsuperscript{223}

\textsuperscript{219} U.C.C. § 2-313 cmt. 3 (1994).
\textsuperscript{220} Adler, \textit{supra} note 18, at 473 (citing U.C.C. § 2-313 (Proposed Official Draft, September
10, 1993)).
\textsuperscript{221} U.C.C. § 2-313 Reporter's Note 4 (Proposed Draft October 1995).
\textsuperscript{222} \textit{Id}.
\textsuperscript{223} The Reporter's Notes indicate that although the October 1996 draft drops the language
of presumption, "the effect [of the draft] is roughly the same." Reporter's Note 2 (1996). The
proposal says that once it is established that a seller made or furnished to a buyer an affirmation
or promise relating to the goods, the affirmation or promise becomes part of the agreement and
is an express warranty unless the seller proves that a reasonable person in the position of the
buyer would conclude otherwise. U.C.C. § 2-313(b)(3) (Proposed Draft January, 1996). The lan-
guage of the proposal does not say that there is a presumption that a representation of the
As discussed above,\(^{224}\) the Reporter's Notes to the 1993 and October 1995 drafts indicate that one of the factors a seller can invoke to negate inclusion of an affirmation or promise in an agreement is reliance.\(^{225}\) The notes inappropriately undermine the enforceability as warranties of affirmations or promises by stating that there is no warranty if a buyer did not rely on an affirmation or promise or relied on the skill and judgment of a third person rather than on the seller's representation.\(^{226}\) The apparent basis for the latter standard is that the buyer did not rely on the seller's representation but on the third person. By injecting a reliance requirement, the notes inefficiently increases transaction costs in the creation of express warranties and deny enforceability to affirmations and promises that are included in a product's price. As discussed above,\(^{227}\) reliance on the skill and judgment of a third person or on the buyer's own inspection should not vitiate the existence of a warranty particularly when it is a representation that would be made to anyone in the market and is captured in the product's price. Even when a seller's affirmation or promise is an idiosyncratic one, valuable only to the buyer, reliance on a third person's judgment should not negate the existence of a warranty so long as there is evidence of negotiation with respect to the claim because the buyer's utilization of the third person's judgment may be simply verification of the seller's representation. Only if the evidence establishes that there is a price discount excluding the affirmation or promise from the deal should enforcement of the representation be denied.

\(^{224}\) See supra text accompanying notes 221-23.

\(^{225}\) Under the 1996 Proposed Draft, an affirmation or promise is made to a remote buyer via a communication to the public, the buyer has the burden of proving that the buyer was reasonable in concluding that the representation became part of the deemed agreement with the seller. U.C.C. § 2-313(b)(2) (Proposed Draft January 1996). The Reporter's Note makes clear that the difference between the situations of a remote and an immediate buyer is that the seller has to establish that a reasonable person in the immediate buyer's position would not conclude that the representation was part of the agreement whereas the remote buyer must prove that its belief as to inclusion of the representation was reasonable. Reporter's Note 6 (1996). The Note does not indicate, however, that the factors relevant to the reasonableness of the relevant belief vary based on whether the buyer is an immediate or remote buyer. Moreover, the Reporter's Notes to the 1995 draft dealt with at least one of those factors, knowledge of the affirmation or promise, in a context that pertained to a remote buyer. Reporter's Note 5 (1995). Thus, the factors, such as reliance, that are discussed in the text with respect to immediate buyers are equally applicable to remote buyers. The only difference in treatment is that the remote buyer has to prove that it knew of, believed in, and relied on the seller's affirmation or promise.

\(^{226}\) See supra notes 221-22 and accompanying text (discussing buyer's reliance on third party sources of information).

\(^{227}\) See supra Section IV.D (discussing the general principle that inspection does not preclude the creation of a warranty when the warranty is made to the market in general).
According to the Reporter’s Note to the 1995 draft, a seller can also prove that a reasonable person would not believe that an affirmation or promise was part of the parties’ agreement by proving that the buyer did not believe the representation.228 As discussed previously,229 a buyer who knows or through the exercise of reasonable care should know that a representation is singularly false in his transaction should be precluded from enforcing the claim. Similarly, if the buyer inspects the goods and discovers or through the exercise of reasonable care should discover that a representation is false or that the goods do not conform to a claim, he should be precluded from purchasing the good and enforcing the representation as a warranty. In these instances and in cases where the affirmation or promise is classically or universally false and the buyer knows or through the exercise of reasonable care should know it, the buyer should be precluded from enforcing the representation even, in situations where the buyer subjectively knows the claim is false, if the seller knew the representation was false. Denying enforcement to a representation in these circumstances not only protects against adverse selection and moral hazard but also averts a deadweight loss resulting from the transfer of resources from the person making the representation to the person claiming to have relied on it. The basis in the Reporter’s Note for establishing that a reasonable person would not consider that a representation was part of an agreement, disbelief in an affirmation or promise, is predicated on the conclusion that buyers who disbelieve claims either do not believe or are unreasonable in believing that the representation is part of the agreement. The defense to a warranty that we advocate is different. Our defense is based on information that a buyer has or should have about the truthfulness of a representation rather than on the buyer’s subjective conviction or state of mind about the representation’s truthfulness. Moreover, our standard for refusing to enforce a false representation as a warranty is based on avoiding the inefficient consequences of either knowingly purchasing a false representation or failing to invest sufficient resources to discover its falsity and on providing correct incentives for the person with the better access to information to disclose the representation’s falsity. This standard better accords with an efficient market test for warranties.

The language in the 1996 draft concerning a seller’s proof that a reasonable person in the buyer’s position would conclude that a repre-

229. See supra Section V.B and accompanying text (precluding enforcement avoids misallocation of resources, adverse selection, and moral hazard).
sentation did not become part of the parties' agreement appears sufficient to deal with claims regarding experimental products. Since there is no market price to capture such representations and since buyers should understand that the seller faces a substantial probability of being unable to produce the represented product or does not have a comparative advantage in providing the buyer with a remedy should the product not be produced, the claims should not be considered warranties unless the seller makes clear that he will produce the product or provide a remedy. In providing that a representation is not part of the agreement if it is unreasonable for a person in the position of the buyer so to conclude, the draft gives courts sufficient latitude to refuse enforcement of claims that the above circumstances would indicate are merely commitments to exert reasonable efforts to produce the experimental good.

One of the greater deficiencies subsumed in the 1996 draft and articulated in the 1995 Reporter's Notes is the requirement that a buyer know of an affirmation or promise prior to the time of purchase for the representation to be part of the parties' agreement. The 1993 and 1994 drafts of section 2-313 each provided that a buyer could enforce as a warranty an affirmation or promise made to the public even if the buyer was unaware of the representation. The Reporter's Note to the 1993 draft stated:

If the advertising is current at the time of contracting, and other buyers were aware of and believed it, there is no reason to protect the seller against claims by buyers who purchased without information or with disbelief. All buyers paid a market price for an advertised product, and the seller should be held to the public warranties made.

Although deficient in a number of respects, the prior drafts represented a substantial improvement over existing cases that require a

233. The drafts inappropriately denied enforceability to market representations made in an individually negotiated or singular transaction. As discussed above, affirmations or promises that a seller makes in such a transaction should be enforceable without prior buyer knowledge of the representations so long as they are representations that any member of the market would value. See supra part III.B. Although the proposals appeared to cover representations made to the public in media such as advertising, it was unclear whether they applied to affirmations or promises found in manuals and on writings found in product containers. Similarly, it was unclear whether the drafts governed affirmations and promises found in standard form contracts even though such documents contain terms generated in the market in a manner similar to other market terms. The 1994 draft also excessively narrowed the effect of affirmations or promises that are made to the market. The draft provided that a seller could rebut the presumption that a representation was part of an agreement in a "public" affirmation or promise case by proving
buyer to have had knowledge of a representation made to the market prior to the time of purchase.234

The Reporter’s Note to the 1995 draft indicated that the 1993 and 1994 proposals allowing a buyer unaware of a representation made to the public to enforce it as a warranty were eliminated from the 1995 draft, and thereafter the 1996 draft, for three reasons. First, the proposals went beyond existing case law.235 Although the overwhelming weight of case law imposes a knowledge requirement,236 it is difficult to perceive such case law as a reason for including such a requirement in the revised Article II. A purpose for revising Article II is to change at least some parts of existing law.237 Moreover, the revised Article II is to become part of a code, one of whose central purposes is to modernize the law governing commercial transactions.238 Retention of the knowledge requirement will do just the opposite, for that requirement and the case law imposing it are based on faulty understandings of the manner in which markets create warranty and other terms and on a failure to recognize the inefficiencies of a knowledge requirement. To retain the knowledge requirement and follow these cases would only perpetuate these mistakes and make it more costly for buyers and sellers to create and buyers to enforce express warranties for which they

that the affirmation or promise was made to a segment of the public of which the buyer was not a part. U.C.C. § 2-313 Reporter's Notes (Proposed Draft 1994). This provision clearly was at odds with how markets establish prices and allocate resources. Since buyers and sellers can easily move between geographical market “boundaries,” since goods flow freely within markets, and since prices do not “know” buyers or boundaries, it is not clear what being outside a market segment means. If a buyer purchases a product at the market price, the buyer has purchased all the attributes in the bundle, notwithstanding any seller’s intention to exclude some buyers. In addition, information about products moves quickly, and in most cases efficiently, over both time and space. Thus, when a homogeneous product is offered for sale, the general terms will be included in the market, independent of the sellers’ expectations. Only where a seller specifically prices a product for a sub-market segment, and makes differential terms known to the market, should the law preclude a buyer from being able to enforce an affirmation or promise as a warranty.

234. See supra notes 71 and 81 (discussing the split in authority concerning whether a buyer need have been aware of an affirmation, promise, or description for it become part of the bargain).


236. See supra cases collected in notes 71, 81 (listing numerous cases from various jurisdictions imposing a knowledge requirement).

237. See U.C.C. § 2-207 (Proposed Draft January, 1996) (revising existing U.C.C. § 2-207 and requiring express agreement (except in transactions involving standard form records) to all standard terms, including those in an offer, that materially alter the terms of the agreement); see also Proposed UCC § 2-316(e) (requiring a consumer to expressly agree to a disclaimer of the implied warranty of merchantability or fitness for purpose, a requirement not imposed by existing § 2-316).

238. See U.C.C. § 1-102(2) (the purpose of the UCC includes the simplification, clarification, modernization, expansion and uniformity of the law governing commercial transactions).
pay. The second reason for eliminating the 1993 and 1994 proposals was that they appeared to create a tort claim. This assertion apparently is premised on a notion that the seller’s liability where a buyer is unaware of an affirmation or promise is noncontractual in nature. As discussed earlier, however, as a matter of contract law a party who assents to a bargain should be able to enforce one of its terms even if he was unaware of the term at the time of entering into the contract. Granting such enforcement is consistent with the manner in which contract law views contracting behavior, i.e., based on the objective behavior of the parties, and with the manner in which parties in fact enter into such exchanges. Parties entering into contracts today bargain for an entire bundle of attributes and terms, most of which are dictated by the market, some or many of which are unknown to the parties. To enforce such bargains is not to depart from contract to tort law but rather to recognize the manner in which parties efficiently establish the terms of their bargains. Finally, the 1995 draft, and thereafter the 1996 draft, deleted the prior proposals to eliminate the knowledge requirement in affirmations or promises made to the public because the proposals would have been difficult to apply.

Although there were a number of deficiencies in the 1993 and 1994 draft proposals, the test we propose for an express warranty is not difficult to apply. Whether an affirmation or promise is part of an agreement depends on whether the seller made or would have made the representation to the market as a whole. If the seller contends that the representation is not part of a sale, he must prove by statistical tests that the representation was not included in the market price or that the parties to the contract specially negotiated to remove the warranty generally through a lower price. If a seller proves that a representation is idiosyncratic in character, the buyer must prove that there was negotiation over the term or that the buyer relied on the seller’s affirmation or promise. As discussed earlier, these

240. See supra text accompanying notes 110–29 (discussing the general principle that the affirmations or promises contained in a bargain should be enforceable irrespective of whether the buyer was aware of, or valued, such affirmations or promises).
242. See supra note 233 (these deficiencies included the denial of enforceability for market representations made in individually negotiated transactions and a lack of clarity as to whether affirmations or promises found in manuals or standard form contracts are covered).
243. See supra text accompanying notes 74–78 (discussing the market test under which affirmations or promises which are demonstrably offered to the market as a whole may be included as express warranties).
244. See supra text accompanying note 76 (referring to the use of statistical tests).
standards are consistent with how markets operate and provide efficient rules for warranty creation.

Although the 1996 draft excessively restricts some representations from being treated as warranties, it appears to perpetuate the present section's inappropriate enforcement of post-contract affirmations and promises. Such claims should be treated as warranties only when a seller makes them to retain the buyer's goodwill, when the representations are made to meet changed conditions, or when the representations are given to have the buyer forgo his right to reject or revoke acceptance of nonconforming goods. The draft continues the rule under the existing Code that post-contract representations are enforceable without these limitations thereby enforcing purely gratuitous promises which ought not be considered part of the parties' agreement.245

VII. CONCLUSION

Markets create product bundles and prices to reflect the attributes being offered by the seller and valued by the buyer. Whether an affirmation or promise is part of a bargain is defined by the price established in the market. Thus, reliance and individual negotiation are not required for creating express warranties except for idiosyncratic commitments or representations. The appropriate text suggested by this article is to determine what terms are being offered in the market. The suggested test promotes efficiency, reduces uncertainty, and provides incentives to correct false representations made by sellers.

This test can be easily implemented and interpreted by courts, thus reducing litigation and other forms of transaction costs. Moreover, this test would provide incentives for sellers to be more cautious about the nature of the claims which they offer to the whole market, since these claims will be incorporated into the market price and thus be enforceable as warranties by all purchasers except those who know, or through the exercise of reasonable care should know, the claims are false. Thus, this test will improve the flow of valuable information into the market in a manner which will benefit both buyers and sellers.

This market based test also provides for appropriate enforcement of warranties and correct behavioral incentives where the affirmation or

245. The Reporter's Note indicates that a seller might establish that a reasonable person in the buyer's position would not have concluded that a representation was part of the agreement by proving that the affirmation or promise was stale. Reporter's Note 5 (1995). Again the language of the section appears adequate to deal with representations that should be considered as lapsed either by their own terms or by the circumstances. U.C.C. § 2-313 Reporter's Note 5 (Proposed Draft October, 1995).
promise being offered to the market is false. Not only does the proposed approach disqualify from enforcing a representation as a warranty anyone who purchases knowing it is false but also anyone who should have discovered the falsity of the representation through the exercise of reasonable care. Finally, this Article's model demonstrates how the claims of various buyers should be treated while the market goes through the several phases of discovering that a representation is classically false.

Finally, the current revision draft of section 2-313 (proposed section 2-313) needs substantial modification. Most importantly, the draft needs to be amended to make clear that a buyer need not know of nor rely on an affirmation or promise made to the market in order for the representation to be part of the parties' agreement and therefore an express warranty. Unless so amended, the revision to Article II will not modernize commercial law for the 21st century but perpetuate a faulty notion about how warranty terms become part of parties' agreements, impose inefficient contracting rules and deprive buyers of the terms for which they have paid.