Examining Restraints on Freedom to Contract as an Approach to Purchaser Dissatisfaction in the Computer Industry

Disgruntled consumers of computer products are beginning to make their complaints known. Throughout the country, newly formed consumer activist groups have begun to lobby for legislation protecting buyers of computer products. Moreover, consumers are increasingly expressing their dissatisfaction through litigation. This outpouring of complaints has sparked sympathy for the “downtrodden” computer user. But the natural inclination to root for the underdog—to cheer the common man in his battle against International Business Machines, Inc.—must not dictate a legal resolution of this problem. The past decades have seen remarkable and revolutionary advances in computer technology, and the response to complaints by unhappy consumers might hamper the potential for future technological accomplishments. The current allocation of losses between consumers and vendors in the computer industry and the legal doctrines applicable to disputes concerning their relationship deserve more careful analysis.

Although each unhappy consumer has her own story to tell and her own particular complaints, a number of general criticisms recur. For example, angry software purchasers complain that companies knowingly ship flawed programs, then charge the consumers extra for “updated” versions with the bugs removed. Hardware purchasers

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1. The word “consumer” as used throughout this Comment includes any purchaser (or lessee) of computer products, whether a business or an individual.
3. Getting Rid of the Bugs, TIME, Oct. 3, 1983, at 68; see also Earman Oil Co. v. Burroughs Corp., 625 F.2d 1291, 1293 n.5 (5th Cir. 1980) (“There have been an enormous number of suits in which disgruntled computer users have attempted to sort out their rights . . . .”).
4. Software is defined as “the programs, subroutines and utilities, together with corresponding documentation and operations procedures, which are implemented upon computer equipment.” J. SOMA, COMPUTER TECHNOLOGY AND THE LAW 419 (1983). Some examples of typical software for personal computers are word processing programs, accounting packages, database applications and interactive games.
6. The hardware includes all the physical components of a computer system. J. SOMA, supra note 4, at 417.
gripe about excessive “downtime,” when machinery is not functioning properly or is in for repairs. Frustrated consumers also complain that sales literature and operating manuals are unintelligible, uninformative, or untrue.

Consumer dissatisfaction is aggravated by manufacturers of computer software who make sky-high claims in their advertising, but do not provide warranty protection. For example, an advertisement for the Jazz program boasts, “Whether you use all functions or just one to get the job done, Jazz may be the only software you’ll ever need.” Yet, the package warns, “Lotus makes no warranty or representation, either express or implied, with respect to this software, its quality, performance, merchantability, or fitness for a particular purpose. As a result this software is licensed ‘as is,’ and you the licensee are assuming the entire risk as to its quality and performance.” Thus, if Jazz has any defects, the literal wording of the disclaimer would bar the purchaser from recovering on a warranty claim.

The prevalence of this type of disclaimer in the industry has prompted courts and legislators to look for novel ways to protect consumers. Of particular concern are the proposals that impose restraints on the ability to contract. This Comment does not discuss any of the wide range of administrative remedies that might serve to ameliorate purchaser dissatisfaction. Rather, the focus here is on the propriety of restraints on contract as a response to dissatisfaction in the computer industry. Unfortunately, proposed protections that involve restraints on

7. See, e.g., Wilson v. Marquette Elects., Inc., 630 F.2d 575, 579 (8th Cir. 1980) (excessive breakdowns, often for more than 24 hours at a time); Consolidated Data Terminals v. Applied Digital Data Sys., 708 F.2d 385 (9th Cir. 1983) (some terminals not operative, remainder did not meet technical specifications); Peterson & Turkel, A Consumer’s Bill of Rights for the Computer Industry, Times Tribune, Apr. 25, 1985, at Bl, col. 1 (complaining about expense of new circuit boards and cables).

8. E.g. Carlson, Caught in the Muddle, Wall St. J., June 16, 1986, at 26D, col. 2 (regarding documentation: “The good news is that it’s not nearly as awful as it used to be.”); Hearings, supra note 5, at 4 (consumer complaining of vague post-purchase documentation in an adventure creation program); Hearings, supra note 5, at 10 (manual did not match application).

9. Hearings, supra note 5, at 17; Wall St. J., June 6, 1986, at 25, col. 1 (manufacturers under attack for failure to provide warranties).

10. Jazz is a bundled software package that includes database management, word processing, and accounting functions. It is manufactured by Lotus, an industry leader in the manufacture of software. See Kneale, supra note 5, at 33, col. 4.

11. Id.

12. Id.

13. For example, information bureaus might be established to aid consumers in making more informed, intelligent choices. The government might establish a rating system for the quality of product information generated by each manufacturer. Or a state might choose to rate, or even license, retail dealers of computer products. Cf, Consumer Activism, Business Computer Systems, Sept. 1985, at 11, 12 (regarding a Minnesota Bill requiring ergonomic workstations and a Florida bill requiring licensing of computer dealers).
contract may burden manufacturers, curtail technological advances, and decrease the availability of computer products. In other words, there is a tension between legal rules guaranteeing consumer satisfaction and efficient, individualized, contractual risk allocation.

This Comment analyzes the extent of the legally cognizable problem in the computer industry and examines the ramifications of various consumer protection proposals. Part I discusses background information relating to the typical sale of computer goods, including the applicability of contract law, tort law, and a recent legislative proposal in California. Part II examines freedom of contract generally and its limitations. It suggests three criteria for determining whether a given approach to resolving disputes over computer goods unduly hinders freedom of contract. The criteria are: 1) the scope of the rule; 2) its duration; and 3) the extent to which it encourages full and accurate disclosure of information. Part III applies the criteria to the consumer protection proposals and discusses them in greater detail. This Comment concludes that, of the proposals discussed, unconscionability analysis best satisfies the three criteria.

I
BACKGROUND

The prevalence of consumer complaints tends to distract our attention from the efficacy of existing doctrine. This Part reviews the current state of the law so as ultimately to define the issues that have not been resolved. It also presents judicial and legislative proposals for modifying existing law. These proposals will be the focus of the analysis in Parts II and III.

Many aspects of law, both traditional and nontraditional, affect sales of computer products. As private, contractual transactions, they are governed by common law contract doctrines and the Uniform Commercial Code ("U.C.C."). These doctrines will be examined both in their traditional form and as modified to suit particular needs of the computer industry. Because some computer products are consumer goods, purchase contracts for these products are also covered by various state

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14. This Comment does not fully address the tangential issue of whether software is a "good" covered by the U.C.C. rather than a service, but the answer is almost certainly yes. See, e.g., Triangle Underwriters, Inc. v. Honeywell, Inc. 457 F. Supp. 765, 769 (E.D.N.Y. 1978) (holding that the software portion of a computer package purchased by the plaintiff was a good not a service, and therefore covered by the U.C.C.) aff'd in part, rev'd in part, 604 F.2d 737 (2d Cir. 1979); see also McGonigal, Application of Uniform Commercial Code to Software Contracts, 2 Computer L. Service, § 3-3, Art. 4 (1974); Note, Taking the "Byte" Out of Warranty Disclaimers, 5 COMPUTER L.J. 531, 536 (1985) (commentators agree that software is a good covered by the U.C.C.) [hereinafter Warranty Disclaimers]; Note, Computer Programs as Goods Under the U.C.C., 77 MICH. L. REV. 1149 (1979).
and federal consumer protection statutes. Tort law concepts can sometimes apply in contractual settings in the computer industry, and some courts liberally invoke them. And, finally, there are myriad possibilities for legislative efforts in this area. One such effort, which was introduced in the California Legislature, will be discussed here.

A. Contract Claims

1. Warranties and Disclaimers

The U.C.C. contemplates three types of warranties: express warranties, implied warranties of merchantability, and implied warranties of fitness for a particular purpose. First, an express warranty is a promise or affirmation by the seller that the product will meet certain specifications or performance capabilities, which are part of the basis of the bargain. Second, a warranty of merchantability will be implied to ensure that the goods meet generally accepted industry standards of merchantability and are fit for the ordinary purposes for which they are used. Finally, if the seller knows or has reason to know of a particular purpose for which the purchaser wants the product, then a warranty of fitness for that purpose will be implied.

The combined effect of these warranties can be quite powerful. However, vendors of computer products often do not give express warranties and disclaim all implied warranties, thereby eliminating the protective effect of these provisions for the average consumer. Section 2-316 of the U.C.C. authorizes disclaimers of implied warranties, provided

16. Clements Auto Co. v. Service Bureau Corp., 444 F.2d 169 (8th Cir. 1971); but see Earman Oil Co. v. Burroughs Corp., 625 F.2d 1291, 1294 n.10 (5th Cir. 1980) (disapproving of tort claims in contract setting).
17. A.B. 1507, 1985-86 Leg., Reg. Sess. (Cal. 1985) introduced by Assembly Members Molina and McClintock. Similar bills have since been introduced in other states, see L.A. Daily J., Aug. 8, 1985, at 2, col. 2 (Minnesota, Louisiana, New York, and Florida), but none have survived.
19. Id. § 2-313(l).
20. Id. § 2-314.
21. Id. § 2-315.
23. For cases where sellers attempted to disclaim implied warranties of fitness as well as merchantability see, e.g., Clements Auto Co. v. Service Bureau Corp., 444 F.2d 169 (8th Cir. 1971); Hi Neighbor Enter., Inc. v. Burroughs Corp., 492 F. Supp. 823, 824-26 (N.D. Fla. 1980); Badger Bearing Co. v. Burroughs Corp., 444 F. Supp. 919, 921 (E.D. Wis. 1977), aff'd without published opinion, 588 F.2d 838 (7th Cir. 1978).
they follow an appropriate form. The provisions allowing disclaimer permit allocation of risk consistent with the freedom of contract, yet protect the buyer from unfair surprises. The basic purpose of warranty disclaimers under the U.C.C. is to allow contracts to reflect the true bargain of the parties. The U.C.C. thus takes the position that, where neither party is unfairly surprised, the parties should be free to bargain over who will bear the risks of the transaction. Thus, unless the bargaining process for computer goods is defective, disclaimers of warranty should be effective.

Consumers are not without protection, of course. Although exculpatory clauses can eliminate the consumer protection afforded by the U.C.C.’s warranty provisions, the Code includes several noteworthy requirements for the validity of such disclaimers. Disclaimers must follow the proper form to be enforceable.

First, the contractual language must be conspicuous, and disclaimers of the implied warranty of merchantability must include the term “merchantability” or “as-is.” Courts have differed over the precise meaning of the word “conspicuous.” The general rule is that disclaimers must appear in bold face, capitals, or otherwise distinguishable lettering. In some instances, however, conspicuousness will depend on whether the bargaining strength and commercial sophistication of the parties made it reasonable that the parties might have knowledge of the provision.

Second, specific language in the purchase contract overrides a general warranty disclaimer when the two cannot be reasonably reconciled. For example, in one Ninth Circuit case, the written specifications given by the vendor to the vendee stated that newly

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24. U.C.C. § 2-316.
25. See id. § 1-102 official comment 2; see also 2 W. HAWKLAND, UNIFORM COMMERCIAL CODE SERIES 381 (1982) (§ 2-316 consistent with principle of freedom of contract announced in § 1-102).
26. 2 W. HAWKLAND, supra note 25, at § 2-316:03; U.C.C. § 2-316 official comment 1.
27. 2 W. HAWKLAND, supra note 25, at § 2-316:03.
28. U.C.C. § 2-316(2)-(3).
30. See U.C.C. § 1-201(10) (language is conspicuous if it is in larger or in other contrasting color); 2 W. HAWKLAND, supra note 25, at 383.
33. Consolidated Data Terminals v. Applied Digital Data Sys., 708 F.2d 385 (9th Cir. 1983).
installed computer terminals would operate at 19,200 baud, but the terminal in fact would not operate at more than 4,800 baud. The court held that the general warranty disclaimer would not prevent the vendee from recovering damages for the defendant's breach because of the precision of the specifications.

Furthermore, in California, the U.C.C. has been amended to incorporate the Song-Beverly Consumer Warranty Act. The Song-Beverly Act primarily applies to written warranties. If a vendor gives a written, express warranty, the Act prohibits her from disclaiming implied warranties, although the Act limits the duration of the resulting implied warranties to match the duration of the express warranty. If the vendor makes no express warranty, as is usually the case, the vendor may disclaim implied warranties provided the words "as-is" or "with all faults" appear prominently in the disclaimer. Similarly, the federal Magnuson-Moss Act, like its California counterpart, provides little protection to consumers because manufacturers and sellers seeking to avoid the Act's restrictions may simply offer no warranties at all.

Finally, some states have amended section 2-316 of the U.C.C. to render disclaimers of warranties for consumer products unenforceable. Thus, a purchaser of computer goods would not be limited by a warranty

34. Baud is "[a] unit of speed used in describing signaling capabilities of computer hardware, equal to the number of distinct elements, or states, per second." J. SOMA, supra note 4, at 415. In other words, the number of baud describes the rate at which the computer can send signals.

35. Consolidated Data Terminals v. Applied Digital Data Sys., 708 F.2d 385, 388 (9th Cir. 1985).

36. Id. at 391-92.

37. CAL. CIV. CODE § 1790.3 (West 1983).

38. Id. § 1793.

39. Id. § 1791.1(c).

40. Id. § 1792.4.


42. Like the Song-Beverly Act, the Magnuson-Moss Act aims to prevent deception in the consumer setting, not to obtain any sort of comprehensive warranty protection for purchasers. It prohibits the use of disclaimers of implied warranties where written warranties are provided because such a practice may deceive consumers.

disclaimer in the purchase contract, and the risk of product failure would always be allocated to the vendor.

2. Remedies and Consequential Damages

Another common source of frustration for computer buyers is contractual limitation of remedies and damages. For example, vendors often limit remedies to the repair or replacement of flawed equipment. This type of limitation is commonly known as a "repair or replace" provision. Again, however, the U.C.C. protects consumers from potential vendor abuse. Under the U.C.C.'s "essential purpose" doctrine, if a contractually provided repair-or-replace remedy fails of its essential purpose, all remedies under the U.C.C. become available to the buyer.44

Vendors also commonly disclaim liability for consequential damages,45 i.e., those damages that may reasonably be viewed as arising out of the breach of contract or may "reasonably be supposed to have been in the contemplation of both parties."46 Consequential damages in the context of computer sales can be extraordinarily costly because the vitality of the vendee's business often depends on the proper functioning of its computer system. In addition, the remarkable development of computer technology allows small, relatively inexpensive machines to service large companies. Thus, a major corporation could go out of business, or cease functioning for a long time, because of a breakdown in a computer system or software which cost only a few thousand dollars. As a result of this high liability potential, many computer products vendors, particularly smaller fledgling businesses, must limit the buyer's recovery to actual damages to stay in business. The U.C.C. facilitates the negotiation of such risks by providing that vendors may exclude consequential damages provided such exclusion is not unconscionable.47

3. Unconscionability

The provisions of the U.C.C. do not always favor vendors. An important consumer protection measure the U.C.C. provides is the doctrine of unconscionability. Under the U.C.C., a finding of unconscionability allows a court the discretion to void all or part of a contract.48

44. U.C.C. § 2-719(2).
45. See infra text accompanying notes 199-212.
47. U.C.C. § 2-719(3); see also, Chatlos Sys. v. National Cash Register Corp., 635 F.2d 1081, 1086 (3d Cir. 1980) (validity of exclusion of consequential damages turns on question of unconscionability); Gates Rubber Co. v. USM Corp., 508 F.2d 603, 616 (7th Cir. 1975) ("Section 2-719 was intended to encourage and facilitate consensual allocation of risks . . . .") (quoting V-M Corp. v. Bernard Dist. Co., 447 F.2d 864, 869 (7th Cir. 1971)).
48. U.C.C. § 2-302(1).
Unconscionability has substantive and procedural components. Substantive unconscionability exists when a contract is "unreasonably favorable" to one party. Unless it is extreme, substantive unconscionability must be accompanied by procedural unconscionability, a gross inequality of bargaining power between the parties. In general, the doctrine of unconscionability has been reserved for cases of disadvantaged consumers, typically in installment-sale contexts. Courts have exhibited a reluctance to find unconscionability in standard commercial transactions.

In fact, the doctrine is rarely invoked in any setting. It is considered an exceptional doctrine and is reserved for cases that would otherwise result in oppression or unfair surprise. Because the characteristics of unconscionability are so loosely defined, courts have a great deal of flexibility in assessing whether a contract is unconscionable.

A California court of appeal has posited that courts' reluctance to find unconscionability in business settings "is probably because courts view businessmen as possessed of a greater degree of commercial understanding and substantially more economic muscle than the ordinary consumer."

Thus, commercial entities purchasing computer products, like other types of business people, have generally failed to convince courts of...
the unconscionability of warranty disclaimers.\textsuperscript{59}

Nevertheless, in recent years, courts have applied the doctrine of unconscionability more liberally.\textsuperscript{60} Occasionally, courts have found agreements between two commercial parties unconscionable.\textsuperscript{61} Generally, this has occurred when the usual assumptions concerning commercial transactions were not valid.\textsuperscript{62} In fact, the California court cited above said:

\begin{quote}
[G]eneralizations are always subject to exceptions and categorization is rarely an adequate substitute for analysis. With increasing frequency, courts have begun to recognize that experienced but legally unsophisticated businessmen may be unfairly surprised by unconscionable contract terms, and that even large business entities may have relatively little bargaining power, depending on the identity of the other contracting party and the commercial circumstances surrounding the agreement. This recognition rests on the conviction that the social benefits associated with freedom of contract are severely skewed where it appears that had the party actually been aware of the term to which he "agreed" or had he any real choice in the matter, he would never have assented to inclusion of the term.\textsuperscript{63}
\end{quote}

Thus, in some commercial contexts where there was limited bargaining power or where one of the parties did not "profess to understand the size and mechanism of the equipment which would satisfy their needs,"\textsuperscript{64} courts have found contractual provisions unconscionable.\textsuperscript{65}

\textsuperscript{59} See, e.g., Earman Oil Co. v. Burroughs Corp., 625 F.2d 1291, 1300 (5th Cir. 1980) ("In commercial settings such as the instant one, businessmen are presumed to act at arms length."); Badger Bearing Co. v. Burroughs Corp., 444 F. Supp. 919, 923 (E.D. Wis. 1977) (a businessman must "be deemed to possess some commercial sophistication"), aff'd, 588 F.2d 838 (7th Cir. 1978); cf. Chatlos Sys., Inc. v. National Cash Register Corp., 635 F.2d 1081, 1087 (3d Cir. 1980) ("There was no reason to conclude that the parties could not competently agree upon the allocation of risk involved in the installation of the computer system.").

\textsuperscript{60} See Warranty Disclaimers, supra note 14, at 538; see also J. WHITE & R. SUMMERS, supra note 32, at 170-71 (noting recent willingness to entertain unconscionability claims in a commercial setting, but stating that it is too early to predict a trend).


\textsuperscript{63} A & M Produce Co. v. FMC Corp., 135 Cal. App. 3d at 489-90, 186 Cal. Rptr. at 124 (citations omitted) (emphasis in original).

\textsuperscript{64} Industralease Automated & Scientific Equip. Corp. v. R.M.E. Enter., 58 A.D.2d at 490, 396 N.Y.S.2d at 432.

\textsuperscript{65} See also Langemeier v. National Oats Co., 775 F.2d 975, 976-77 (8th Cir. 1985), which held unconscionable a provision in a contract to grow popcorn which provided that the defendant could reject any portion of the plaintiff's crop damaged due to freezing weather. Despite the plaintiff's experience as an agronomist, the court focused on the defendant's knowledge that the plaintiff had never before grown popcorn and did not know how long it takes popcorn to reach a
For example, in *Industralease Automated and Scientific Equipment Corp. v. R.M.E. Enterprises, Inc.* warranty disclaimers in a commercial lease were held unconscionable. In *Industralease*, the defendant was pressured into signing a contract with the managers of a picnic grove to lease equipment to dispose of rubbish through a non-pollutant burning process. However, the leased equipment did not achieve any of the defendant's purposes so the defendant stopped paying rent despite the fact that the lease contained written disclaimers of express and implied warranties.

The court affirmed a jury verdict for the defendant and held the disclaimers unconscionable. In particular, the court pointed out that:

"At this point of the bargaining, with the beginning of the season for the defendants' operations at hand, the defendants were clearly at a disadvantage to bargain further . . . ."

"The defendants did not pretend to have equal expertise in the field; they had dealt with [the plaintiff] as purchasers seeking a means to meet a necessity arising in the business, and [the plaintiff] undertook to design and build equipment to achieve the desired result."

Similarly, in recent years computers have become a virtual necessity for many small businesses. Therefore, based on reasoning like that in *Industralease*, a court might find—and this Comment argues that courts should find—unconscionability in commercial transactions for computer products where the vendee lacks the sophistication necessary to create bargaining equality.

### B. Recovery in Tort

Contract law provides computer-goods consumers with some protection in the marketplace. Traditional contract remedies carefully balance the parties' interests in standard transactions. Even where a purchaser may not be able to achieve a satisfactory recovery in contract, however, he may still be able to recover in tort. Although the domain

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67. *Id.* at 483-85, 396 N.Y.S.2d at 428.
68. *Id.*
69. *Id.* at 489-90, 396 N.Y.S.2d at 432.
70. Of course, calculation of damages will be different in tort. Damage to property that occurs as a direct result of a tort will probably be recoverable. In contrast, *pecuniary* losses generally are not recoverable because courts feel that loss of profits, etc., is too speculative. Thus, damage to the computer itself, or even to the user's stored data, might constitute property damages recoverable in tort. On the other hand, lost profits for the time the computer was "down" or the user was unable to use the software are probably not recoverable.
of tort law generally does not include consensual transactions, several tort claims may arise in contractual settings. Fraud, which is almost universally accepted as a valid cause of action, is the classic example. Negligent and innocent misrepresentation are also valid in some jurisdictions.

I. Intentional Misrepresentation

Of the possible tort claims, the most accepted line of argument for the buyer is fraud. While courts have not reached consensus on the propriety of other tort remedies for transactions covered by the U.C.C., most courts will entertain fraud claims even in the presence of a contractual bar. If a buyer can show that a seller intentionally misrepresented a material fact upon which the buyer relied to his detriment, then the buyer can recover damages.

In Glovatorium, Inc. v. NCR Corp., for example, the Ninth Circuit affirmed an award of actual and punitive damages on a claim of fraud despite warranty disclaimers and remedy limitations in the sales contract. In that case, the seller represented at the time of sale that the computer system and software would perform routine accounting functions. The buyer was shown a demonstrator model that performed some functions quickly and efficiently. However, after several attempted repairs and long delays, even the tasks that could be accomplished using the computer system could be done faster manually. The appellate court held that the evidence supported the conclusion that the seller knowingly misrepresented the capabilities and speed of the system. The court therefore upheld a jury award of damages for fraudulent misrepresentation.

Furthermore, once fraud has been shown, contractual limitations cannot protect the vendor from ordinary negligence claims. In Invacare Corp. v. Sperry Corp. a federal court ruled that in addition to liability for misrepresentations the defendant computer vendor had a duty of ordinary care in helping the buyer select a computer system. The vendor protested that the purchase contract provisions specifically limited

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71. See infra notes 83-90 and accompanying text.
72. See, e.g., Invacare Corp. v. Sperry Corp., 612 F. Supp. 448, 451 (N.D. Ohio 1984) (seller could not rely on a provision of the contracts to bar a claim when contracts were induced through fraud); E. Farnsworth, supra note 54, at 466 (clause in contract denying existence of representations ineffective against evidence of fraud).
73. Glovatorium, Inc. v. NCR Corp., 684 F.2d 658 (9th Cir. 1982).
74. Id. at 661.
75. Id.
76. Id. at 660.
77. Id.
78. Id. at 664.
80. Id. at 453.
his liability for negligence, but the court held that a contract induced through fraud could not shield the defendant.\textsuperscript{81}

2. \textit{Negligent Misrepresentation}

The availability of actions for negligent misrepresentation, absent intentional conduct, is somewhat more problematic.

Section 552 of the Restatement of Torts provides:

One who, in the course of his business, profession or employment, or in any other transaction in which he has a pecuniary interest, supplies false information for the guidance of others in their business transactions, is subject to liability for pecuniary loss caused to them by their justifiable reliance upon the information, if he fails to exercise reasonable care or competence in obtaining or communicating the information.\textsuperscript{82}

Yet, some courts and commentators dispute whether claims for unintentional torts should be available in the contract setting.\textsuperscript{83}

A Colorado court recognized a cause of action for the tort of negligent misrepresentation as set out in section 552 of the Restatement of Torts.\textsuperscript{84} The court held that the plaintiff, who was dissatisfied with his contract for a computer and operating system, was not limited to the contractual remedies provided by Article 2 of the U.C.C.\textsuperscript{85} According to the court, where the vendor negligently represented his product, and the vendee reasonably relied on the representation, the vendee can recover in tort despite the existence of an analogous, contemporaneous claim sounding in contract.\textsuperscript{86}

Such a rule may overprotect the vendee, however. The U.C.C. explicitly allows contracting parties to include the warranty provisions of their choice.\textsuperscript{87} Yet, because negligent misrepresentation requires no showing of intent, the seller could be held to a warranty she did not intend to create, thereby upsetting the bargain struck by the buyer and seller. One can imagine, for example, a situation where a small vendor sells a software package to a large company and they agree to place most of the risks on the larger company. The contract might exclude all warranties, express or implied, while compensating with a somewhat reduced price. Nonetheless, where the doctrine of negligent misrepresentation is

\textsuperscript{81} Id. at 454.
\textsuperscript{82} RESTATEMENT (SECOND) OF TORTS § 552 (1976).
\textsuperscript{85} Id. at 50-51.
\textsuperscript{86} See id. at 51.
\textsuperscript{87} U.C.C. § 2-316 (1977).
in force, the vendor could still be liable for asserting her honest belief that the software can perform certain functions.

The tort of negligent misrepresentation thus restricts the parties' ability freely to allocate responsibility for determining the capabilities and weaknesses of a product. Instead, the vendor is forced to warrant that, regardless of the terms of the contract, any assertions she makes are backed by due care and competent research. Some courts have accordingly held that unintentional misrepresentation actions would nullify the allowance of warranty disclaimers under U.C.C. section 2-316 and therefore should not be available.88

3. Innocent Misrepresentation

The tort claim that would be most helpful to the disgruntled consumer is innocent misrepresentation. It is also the most controversial. Section 552C of the Second Restatement of Torts provides:

One who, in a sale, rental or exchange transaction with another, makes a misrepresentation of a material fact for the purpose of inducing the other to act or to refrain from acting in reliance upon it, is subject to liability to the other for pecuniary loss caused to him by his justifiable reliance upon the misrepresentation, even though it is not made fraudulently or negligently.89

In other words, a purchaser could recover without proving intent or even negligence. She would merely have to prove she relied to her detriment on something the vendor said about the product. Thus, a software vendor whose product did not live up to expectations could still be liable for statements made at the time of sale even if there were no way of knowing of the product's inadequacies at the time of sale. In other words, there would be no way of allocating to the buyer the risk of undiscovered deficiencies.

Courts have split on the question of whether to allow tort recovery for innocent misrepresentation in the face of a contract between the parties.90 One writer has suggested the relative sophistication of the buyer

89. RESTATEMENT (SECOND) OF TORTS, § 552C (1976).
90. See Warranty Disclaimers, supra note 14, at 551. Although disallowance of tort claims is probably the more universally accepted approach, there are two conflicting lines of cases: some courts are willing to entertain innocent misrepresentation claims despite the presence of a contract. See, e.g., Clements Auto Co. v. Service Bureau Corp., 444 F.2d 169, 178-79 (8th Cir. 1971) ("There is no indication that the disclaimer of warranty negates reliance on false representations made with or without intent to deceive."). Others will not. See, e.g., Earman Oil Co. v. Burroughs Corp., 625 F.2d 1291, 1294 & n.10 (5th Cir. 1980) (misrepresentation claim is contract-related and therefore redundant and impermissible); Investors Premium Corp. v. Burroughs Corp., 389 F. Supp. 39, 42 (D.S.C. 1974) (absent showing of negligence or fraud, plaintiff's attempt to avoid integrated contract fails).
as the distinguishing factor in such cases.91 Courts appear more sympathetic to ignorant purchasers than to sophisticated business persons.92 While a uniform rule does not emerge from these cases, it is at least clear that courts are reluctant to enforce warranty disclaimers automatically and that considerations of fairness as well as freedom to contract have influenced the decisions.

C. State Legislative Efforts: The Molina Bill

Another approach to the consumer dissatisfaction problem is embodied in a recent legislative proposal in California.93 Assembly bill 1507 has several important features. First, it mandates inclusion of implied warranties of fitness and merchantability in every sale or lease of computer products.94 Second, it requires the manufacturer and seller to expressly warrant that the product conforms to the specifications and performance capabilities set forth in their advertisements.95 Neither the express nor the implied warranty can be disclaimed or limited in duration.96 Third, the bill mandates that if the manufacturer or seller does not promptly remedy a breach of either warranty, the buyer may revoke acceptance within a reasonable time.97

The bill, introduced by Assembly Members Molina and McClintock, has met considerable opposition from the computer industry.98

II
FREEDOM TO CONTRACT

As the discussion above indicates, vendees already have recourse to a number of traditional theories and newer, nontraditional proposals may

92. Id.
93. A.B. 1507, 1985-86 Legis., Reg. Sess. (Cal. 1985). After passing the California State Assembly the Molina bill was allowed to expire in the Senate Insurance Claims and Corporations Committee in August, 1986. Assembly Member Molina's office states that the bill was withdrawn to allow for negotiations between herself and industry representatives, but that the bill may be reintroduced in the near future. In the meantime, ADAPSO, an organization of several hundred software vendors nationwide, has prepared some self-regulatory guidelines for the industry in an attempt to mollify Molina. The membership has not yet agreed to comply with the guidelines, and the fate of Molina's proposed consumer protection measures is still unsettled.

The bill did not apply to custom computer programs or business transactions between an original equipment manufacturer and a business purchaser for more than $25,000. Id., proposed § 1797.7(c).
94. Id., proposed § 1797.7(a)(1)-(3).
95. Id., proposed § 1797.7(a)(4),(5).
96. Id., proposed § 1797.7(f).
97. Id., proposed § 1797.7(g)(1). The bill also provides that six months shall always be presumed reasonable. Id., proposed § 1797.7(g)(2).
significantly expand the available remedies. In fashioning appropriate remedies it is important to address the problem of consumer dissatisfaction, but in doing so we must not lose sight of systemic values.

A. In General

In general, our society depends on a marketplace where participants can bargain freely to create legally enforceable contracts. One commentator stated, "A society that relies on private enterprise for most of its food, clothing, shelter, transportation, and amusement, and for the capital plant needed to produce them, must evidently allow its private enterprisers freedom to act and plan, and to make their plans secure by contracting with each other." In American society and in the American legal system the importance of freedom of contract is firmly established. Thus, for example, under the U.C.C., "freedom of contract is the rule rather than the exception."

The consumer protection proposals for the computer industry, by contrast, tend to impose outside limitations and policy considerations on the bargaining process. These restraints on contract necessarily conflict with the old notions of free-market contractual relations. While this conflict between contractual freedom and consumer protection cannot always be resolved by a free-market approach, the basic doctrine at least bears examination.

The dedication to the freedom to contract exhibited by our society derives from many sources, including a desire for economic efficiency and a respect for individual autonomy. In general, society benefits

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100. The contracts clause of the United States Constitution provides that no state shall pass any law impairing the obligation of contracts. U.S. CONST. art. 10, cl. 1. Regardless of its import as a constitutional limitation on state action, see Allied Structural Steel Co. v. Spannaus, 438 U.S. 234 (1978) (discussing the rescue of the contracts clause from "comparative desuetude"), the contracts clause clearly conveys the fundamental importance to the framers of the freedom to make contracts. The Supreme Court, in some infamous cases, tried at one time to protect freedom to contract under the due process clause. See, e.g., Lochner v. New York, 198 U.S. 45 (1905). Although this line of cases has long since been disapproved, see Nebbia v. New York, 291 U.S. 502 (1934), it still evidences the powerful role of freedom of contract.

Of course, society has moved away from the unrestricted freedom of contract of the nineteenth century. J. WHITE & R. SUMMERS, supra note 32, at 2-6; E. FARNSWORTH, supra note 54, at 22, but "the parties' power to contract as they please for lawful purposes remains a basic principle of our legal system." J. WHITE & R. SUMMERS, supra note 32, at 5; see also E. FARNSWORTH, supra note 54, at 325 (in general, parties are free to make contracts and courts will enforce them).
102. While this author places a great deal of faith in the free-market approach, opinions certainly differ. However, a discussion of the efficacy of free-market capitalism is well beyond the scope of this paper. This Comment accepts the free-market model as the basic framework of analysis, and the freedom of contract doctrine as a starting point.
103. See, e.g., E. FARNSWORTH, supra note 54, at 21 ("From a utilitarian point of view, freedom
from having a legal mechanism for enforcing promises: society can distribute resources efficiently and enter into a greater variety of transactions.  

In most cases, a bargained-for agreement will be the most efficient arrangement because the individual parties can best determine the terms of the bargain and who should bear risks or costs.

In the context of consumer protection schemes, the principle of freedom to contract helps to maintain productivity and to promote industries that have a positive impact on society and the economy. Free contractual allocation of burdens allows smaller companies, which might be unable to bear certain risks, to bargain around them. When a pro-consumer policy is adopted, however, members of the affected industry are uniformly forced to bear greater burdens regardless of individual size or circumstances.

In an industry such as computer products, where small, start-up companies and entrepreneurs account for much of the growth and success, a uniformly greater burden on the industry could retard progress. Small companies, which could compete in a freely competitive market, might be forced out of business or might not even enter the market because they could not bear the costs of the increased burden as well as could larger companies.

Furthermore, manufacturers of new, innovative products would face higher development costs because of the increased liability potential, while older, established products, already tested by time, would have a tremendous market advantage. The initial barrier to entering the market would be formidable. For example, under a consumer protection scheme that uniformly allocated risks of defects to the vendor, a start-up that could compete with IBM on grounds of price, technical innovation, and consumer appeal in a particular market, would also be forced by law to compete immediately on grounds of reliability. The costs of introducing a new product that is not yet fully developed but has the potential to advance technology could be prohibitive. These factors could inhibit growth in the industry.

to contract maximizes the welfare of the parties and therefore the good of society as a whole. From a libertarian point of view, it accords to individuals a sphere of influence in which they can act freely."

See also L. Fuller & M. Eisenberg, Basic Contract Law 82 (4th ed. 1981) (enforceability of contract rests on principle of private autonomy).


105. See id.

106. See, e.g., Hearings, supra note 5, at 263.

107. The industry is already fiercely competitive because it is basically composed of many small companies competing with the industry giant—IBM. See Comment, supra note 62, at 94.

108. Cf. RRX Indus. v. Lab-Con, Inc., 772 F.2d 543, 550 (9th Cir. 1985) (Norris, J. concurring in part and dissenting in part) (noncontractually imposed allocation of burden might prohibit participation in the market since "stakes could be far too high for a small software company").
On the other hand, free contractual allocation of risks would allow a firm to adjust its liability potential to any level, subject only to the market appeal of its product. Thus, a freedom of contract policy would provide a comparatively greater degree of encouragement to the rapidly developing and increasingly important "high tech" industries.

Even if consumer protection measures did not drive companies out of the market, they might instead drive up the cost of computer products. As a result, computers could become less available to small businesses and individual consumers. One commentator has criticized permissive attitudes towards noncontractual claims in the computer industry, saying, "It should not be public policy to impede the spread of computerization." Again, one of the positive aspects of a freedom to contract approach is that it probably provides a greater incentive for growth in the computer industry.

B. Exceptions/Limitations

However, particularly in the twentieth century, freedom of contract has given way to regulation in many areas. As society's contractual relations generally have become less individually tailored to the needs of small entrepreneurs and more standardized and subject to monopolistic and government control, restrictions on the freedom to contract have necessarily developed. In some areas there are exceptions to the doctrine of freedom of contract because the benefits of the doctrine depend upon the validity of assumptions about the circumstances of the bargain. Nonetheless, the marketplace for computer goods has remained quintessentially entrepreneurial and, as a result, the concerns motivating regulation in other markets do not always apply.

For example, the doctrine of freedom of contract is founded on the

109. See, e.g., Hearings, supra note 5, at 74.
110. See J. SOMA, supra note 4, at 406-08 (describing effects of technological revolution on industry).
111. This last problem seems particularly unfair because the greatest risk facing a smaller vendor, and thus the greatest contributing factor to price hikes, is probably imposed by large sized purchasers. If a big company loses data or is forced to halt production the damages could be tremendous. This potential liability is the major risk vendors must guard against. Thus, large companies pose the greater risks, yet smaller companies will more likely be precluded from participating in the market.
112. Note, Frankly, Incredible: Unconscionability in Computer Contracts, 4 COMPUTER L.J. 695, 734 (1983). Furthermore, there is always the possibility that consumers do not want to pay for the cost of warranty protection. If a general lack of warranty protection in the computer industry continues in the long run, that might indicate an unwillingness on the part of consumers to pay for such protection. Imposing protection would then artificially inhibit consumption.
113. E. FARNSWORTH, supra note 54, at 22 (the trend in favor of freedom of contract has begun to reverse).
basic assumption that there is private ownership of resources.\textsuperscript{114} Freedom to contract makes little sense in industries that are largely publicly owned. However, regulation of the computer industry on the basis of public ownership is not justified because the industry remains largely in the hands of the private sector.

Another basic assumption is that transactions take place in a competitive market where free enterprise rather than monopoly is the rule.\textsuperscript{115} There appears to be little reason to challenge the validity of this assumption in the context of the computer products industry. It is true that in the hardware market IBM has been the dominant force,\textsuperscript{116} and that although Apple pioneered the concept of home computers, IBM has gained at least equal prominence in this market as well.\textsuperscript{117} However, in spite of IBM's unshakable position, the industry is still "fiercely competitive."\textsuperscript{118} IBM does not have a monopoly and continues to battle with (among others) Apple, Cominodore, Radio Shack and manufacturers of the many IBM clones for its market share.\textsuperscript{119} Therefore, the prominence of IBM may be a relevant factor to consider in determining how to cope with purchaser dissatisfaction in the computer industry, but it is not sufficient to negate the assumption of nonmonopolistic conditions or to warrant abandonment of contract doctrine.

However, assumptions about free bargaining and economic equality are not so easily dismissed. Some derogation from the basic principle may be warranted by the facts of an individual case, particularly where the parties are unable to choose and bargain freely. In the classic example of \textit{Henningsen v. Bloomfield Motors},\textsuperscript{120} the public policy analysis governing an automobile warranty disclaimer begins:

The traditional contract is the result of free bargaining of parties who are brought together by the play of the market, and who meet each other on a footing of approximate economic equality. In such a society there is no danger that freedom of contract will be a threat to the social order as a whole.\textsuperscript{121}

\begin{thebibliography}{99}
\bibitem{Henningsen} As the government assumes ownership and control of resources, "the individual's power to dispose of those resources is lessened, and the role of contract is diminished." \textit{Id.}
\bibitem{Id} \textit{Id.}
\bibitem{Forro} Forro Precision, Inc. v. IBM Corp., 673 F.2d 1045, 1058 (9th Cir. 1982) (IBM, although it did not have a monopoly, had a declining 30-35% share of the domestic electronic data processing market in the early seventies); Comment, \textit{supra} note 62, at 94; see also Greyhound Computer Corp. v. IBM Corp., 559 F.2d 488, 497 (9th Cir. 1977) (approximately 80% of the dollar value of installed base of general purpose computer systems in U.S. was manufactured by IBM at that time).
\bibitem{Note} Note, however, that Apple still has an edge in the educational market for home computers. Smith, \textit{All in the Families}, Wall St. J., June 16, 1986, at 10D, col. 1.
\bibitem{Comment} Comment, \textit{supra} note 62, at 94 & nn.102-04 (industry is characterized by a plethora of small companies competing for a place in the market with IBM).
\bibitem{Smith} Smith, \textit{supra} note 117.
\bibitem{32} 32 N.J. 358, 161 A.2d 69 (1960).
\bibitem{Id} \textit{Id.} at 389, 161 A.2d at 86.
\end{thebibliography}
Thus, where the assumptions of free bargaining and approximate economic equality hold true, there is every reason to adhere to a policy of noninterference with the ability to contract.

Note, however, that Judge Francis went on to say that many contractual settings do not conform to this model and that exceptions must therefore be made to the "age-old tenets of freedom of contract." Modern transactions reflect a more limited bargaining process where adhesion contracts and standardized forms are common. Although intervention in contracts for the sale of goods is minimal, it is used to ensure that the parties "do in fact bargain in acceptable ways and are not so powerful as to substitute coercion for bargain." 122

Thus, where the assumptions underlying the acceptance of freedom of contract have failed, the law has carved out exceptions to the doctrine; the literal language of contracts is not always enforced and bargains are not always honored. For example, where a contractual remedy fails of its essential purpose, the U.C.C. makes available all remedies under the Code. 123 So too, fraud may invalidate even a clear, unambiguous contract. Where one party defrauds the other, the assumption of informed participation in the bargaining process, which underlies freedom of contract, is conspicuously absent. Thus, the rule of fraud, along with the doctrines of duress and undue influence, is "intended to assure that bargaining has taken place in a manner compatible with the public interest in freedom of contract." 124

Similarly, if one party lacks the ability to bargain effectively, a court may deny enforcement of a contract due to unconscionability. 127 The doctrine reflects a concern for the prevention of oppression and unfair surprise 128 where the typical elements of a free bargaining process are absent. 129 This lack of free bargaining undermines the premises for enforcement of contracts. The respect for individual autonomy ordinarily reflected by the freedom of contract approach is meaningless where one of the parties had relatively little bargaining power or none at

122. Id. at 391, 161 A.2d at 87.
124. E. FARNSWORTH, supra note 54, at 23.
125. U.C.C. § 2-719(2) & comment 1 (1977); see also infra text accompanying notes 198-200.
126. E. FARNSWORTH, supra note 54, at 326; see also Weaver v. American Oil Co., 257 Ind. 458, 276 N.E.2d 144 (1971) (the principle that the party submitting and seeking enforcement of the form contract bears the burden of proving that the other party had knowledge of any unusual or unconscionable terms preserves the true meaning of freedom of contract).
129. Even the failure of one of the underlying assumptions does not necessarily call for an alteration of the terms of the contract. For example, there may be procedural unconscionability which may or may not lead to nonenforcement of the contract depending on the presence or absence of the substantive element of unconscionability. See supra notes 48-50 and accompanying text.
Furthermore, in the absence of free bargaining a strict freedom of contract approach does not produce the key benefit it is designed to attain: efficient allocation of resources.

One element that affects the ability of the parties to bargain freely is the availability and accessibility of information in the market. Inaccurate or incomplete information may prevent one of the parties from making an intelligent choice. The inability of the buyer to make an informed choice may put her at an unfair disadvantage and may thus prejudice the bargaining process. In fact, the law sometimes excuses consumers who lack access to information regarding price, quality, or product availability from the exact terms of their bargains. A transaction involving a purchaser whose bargaining power is restricted because of inadequate information flow exemplifies the fallibility of the underlying assumption of bargaining equality.

C. Minimizing the Impact on Freedom to Contract

Courts and legislatures are now searching for an appropriate method of protecting purchasers of computer goods. Of the many possible methods of accommodating these purchasers' complaints, several may serve effectively. However, overemphasis on consumer protection derogates from the values underlying freedom of contract. This Comment argues that the goal of purchaser satisfaction should be balanced against freedom of contract, an ingrained and valuable norm of free enterprise societies. Thus, a legal rule that addresses failed assumptions by altering contractually allocated burdens should only minimally affect freedom to contract.

To minimize the impact, then, a rule should only affect bargains that are the product of failed market assumptions. In addition, the rule should reduce the frequency of these failed assumptions and thus reduce the need to interfere with contractual allocations in the future. There are three important tests to determine whether a corrective rule achieves the optimal balance between upholding freedom of contract and compensating for imperfect market conditions: 1) whether the scope of the proposed rule fits the scope of the existing problem; 2) whether the effective life of the rule will coincide with the duration of the problem; and 3) whether the rule reduces the incidence of problematic transactions by encouraging the free flow of information throughout the industry. I will

130. For example, the doctrine of unconscionability can take into account ignorance, illiteracy, and language barriers. Uniform Consumer Credit Code § 5.108 (1974); Restatement (Second) of Contracts § 234, comment d (1979). Similarly, a New York court declined to enforce a contract where a consumer lacked sufficient knowledge of English to understand that he had waived implied warranties. See Jefferson Credit Corp. v. Marciano, 60 Misc. 2d 138, 302 N.Y.S. 2d 390 (Civ. Ct. 1969).
address in order each of these three tests as applied to contracts for computer technology.

1. **Scope of the Rule**

A corrective rule should alter contract terms only when a lack of free contracting results in an inequitable transaction. There is no need to upset the parties' bargain or to intrude on the bargaining process in every sale of a computer product. To do so would needlessly interfere with the freedom to contract when such interference is not justified. Determination of the appropriate scope of a corrective rule thus calls for careful examination of the scope of the problem. That is, one must locate the flaws in the basic assumptions underlying the freedom to contract in the market for computer products. Despite the sympathetic appearance of most consumer claims, sales of computer products do not generally violate the basic assumption of adequate bargaining power. Thus, though purchaser dissatisfaction may be widespread, the scope of the problem warranting restraints on the bargaining process may be quite narrow. Therefore, the prevalence of failed market assumptions in the computer industry is examined below.

It is first necessary to investigate the relative bargaining power of computer products purchasers. Computational technology serves two distinct classes of vendees: (i) the traditional commercial business class, comprised of medium to large-sized businesses whose purchases are costly and often individualized; and (ii) the rest of the purchasing market, whose computer needs are generally satisfied with mass-produced consumer products purchased in a retail setting.

The commercial business class in the computational technology market does not require additional legal protection in the bargaining pro-
cess. While a large business might be dissatisfied with its computer system, the circumstances of negotiation strongly support a freedom to contract approach. Economically powerful vendees have access to product information, and because they have precise needs and access to computer expertise they will generally bargain for the terms of a computer product purchase. Thus, commercial purchasers generally do not fall within the scope of the "problem" in the computer industry.

The scope of the problem can, therefore, be no greater than the class of unhappy small companies or individual purchasers. Some transactions within this group probably result in dissatisfaction because the basic market assumptions are faulty. On the other hand, some consumers may be dissatisfied simply because of their own poor judgment.

The sources of consumer frustration transcend the problems of faulty products and lack of warranty protection. One such source of dissatisfaction is the existence of minor bugs. In general, this problem can be viewed as an inherent hazard of the computer industry. No matter how strong the legal deterrent, some bugs will still occur due to the large human-error factor in the computer industry's experimental technologies. Consequently, the question to address is how to allocate the risk of these minor defects rather than how to eliminate them.

The problem of minor bugs could potentially be resolved by individualized contractual allocation of the risk, or by an externally imposed legal rule. Even where one of the basic assumptions is false (for example, there was no equality of bargaining power), restricting the bargaining process by imposing an external legal rule may not be justified. The potential danger to the purchaser is small because minor bugs, by defini-

136. Yet such commercial enterprises should still be entitled to the normal contractual protections, such as those available for fraud or failure of contractual remedies.
137. See Note, supra note 112, at 712-13 (large businesses often employ their own computer specialists full-time; expertise can be purchased as needed.) On the other hand, small firms or individual consumers may not have the resources or business acumen necessary to hire consultants.
138. See J. SOMA, supra note 4, at 74 (commercial business software is usually sold on an individual basis, subject to negotiated contract).
139. Note that the purchaser's potential damages will vary greatly even within this class. Some of these transactions may be purely consumer-oriented (for example, the purchase of a home computer for video entertainment functions), while others may be business-oriented (for example, the purchase of a personal computer by a small business for accounting and inventory purposes).
140. A "bug" is an error or malfunction in a computer program. Such errors can range from barely detectible quirks (for example, the program "Framework" calls the command for storing data "save" at some points and "store" at others) to fatal flaws (for example, the program "Symphony" has a bug that kills information when numbers are moved from one place to another in an electronic ledger). Kneale, Bugs Come in All Sizes—And Are Tough to Destroy, Wall St. J., Oct. 2, 1985, at 33, col. 4.
141. See Kneale, supra note 5, at 33, col. 4 (noting manufacturers' resignation to bugs due to complexity of software design); Hearings, supra note 5, at 31-32 (testimony of William Selden: "It is generally accepted in the industry that any piece of software you get will have bugs in it.").
142. A similar phenomenon is minor discrepancies in performance capabilities of hardware.
tion, have little impact on the usefulness of a product. On the other hand, the potential for unduly complicating sales transactions in the computer industry is substantial. Especially because of the likelihood that no deterrent effect would be achieved, it would not be beneficial to try to alter the parties’ allocation of the risk.

Other components of the problem involve more major hazards, including situations where the consumer finds a product basically unsatisfactory, or downright useless. Some products undoubtedly do not function adequately. Such failures of expectations may require legal treatment. But in many situations the consumer purchases an otherwise functional item, only to later discover it does not serve his purposes.

Consumer disenchantment may result in part from the fact that consumers do not, in general, understand what tasks are well suited to computers, or what technology is currently available. A survey indicated that 48% of computer users shopping for software wanted programs that did not exist. Furthermore, the survey estimated that purchasers of personal computers use only about 5% of the machine's capabilities.

This lack of consumer understanding is compounded by the tendency of advertisers to oversell and make outrageous claims. Advertisers try to make people believe that computers “can do everything but slice bread.” As a result, consumers are often dissatisfied because products fail to meet their high expectations.

Thus, information flow between vendors and consumers is clearly deficient. Many factors contribute to the inability of the purchasing public to efficiently process information about computers and to the failure of the computer industry to provide more accessible information. Technophobia may prevent people from informing themselves. Moreover, resentment of the sudden pervasiveness of computer technology and of the radical societal changes computers have effected may cause people to avoid contact with computers. At the same time, the introduction into our social scheme of the computer imperative—“the belief that

143. To be more precise, it is unlikely that deterrence would result, because it would be so inefficient to try to produce standard-size programs 100% bug free.

144. Even where the product is totally useless to the purchaser, there may not be any actual defects in the product.

145. Hearings, supra note 5, at 46 ("Eeverybody who uses a product comes up and says, I wish it did that. Now, are those errors?") Cf., e.g., Consolidated Data Terminals v. Applied Digital Data Sys., 708 F.2d 385 (9th Cir. 1983) (distributor sued manufacturer where product was functional, but did not meet warranted specifications).


147. Id. at 6c, col. 3.


involvement with computers is both good and necessary.\textsuperscript{150} may pressure people into buying unnecessary computer products.

Lack of information may impede effective bargaining for a particular purchaser. For example, a purchaser with little background or sophistication in computers, reading a product description in technical jargon that is accompanied by misleading advertising, may not have realistically adequate bargaining power. Such a lack of bargaining power may weigh against application of the principle of freedom to contract, justifying modification of the contractual allocation of risks.

Vendors in the computer industry should not, however, always be liable for purchasers' basic misconceptions about computer technology. Individuals who lack adequate bargaining power because they do not have access to information are doctrinally distinguishable from those who simply have failed to gather the information. The freedom of contract principle is not premised on actual knowledge of the bargaining parties, but merely on the existence of bargaining power, or the ability to acquire such knowledge.\textsuperscript{151} The failure of a party to inform herself therefore does not independently justify deviation from the tenets of freedom to contract. As for the problem of lack of access to information, even here the freedom to contract should not be altered with respect to all consumers. While impediments to information flow may exist across the entire market, many people have specific knowledge or experience that allows them to overcome such impediments.\textsuperscript{152} Since these consumers' bargaining power is not reduced by the informational impediments, the freedom to contract with such consumers should not be judicially or legislatively altered. Rather, it is only for those consumers who are unable to overcome systemic informational blockages that a reallocation of bargaining power may be warranted.

Finally, consumer dissatisfaction may result from major defects in the computer product. These defects can cause substantial loss, often allocated to the vendee through the use of exculpatory clauses in the contract. The imposition of an economic burden on a consumer is not, however, inherently inequitable. Where the risk of loss has been fairly allocated, the loss itself is not necessarily unfair. An allocation to the consumer would be fair where it resulted from either the consumer's informed, uncoerced choice or from her neglect. Where major defects in the product combine with a failure of the free bargaining process, or


\textsuperscript{151} For example, significant language barriers may constitute insufficient access to information. \textit{See supra} note 130.

\textsuperscript{152} For example, some people may have obtained reliable training and knowledge in the area of computers. Others may simply have sufficient business acumen to discount overblown advertisements and sales hype. Still others may be able to hire consultants.
where the failed expectations of a consumer without bargaining power substantially impair the value of the product, restrictions on freedom of contract are justified.

2. Duration of the Rule

In addition to fitting the scope of the problem in the computer industry currently, the remedial rule should match the duration of the problem. That is, the period of enforcement of the rule should coincide with, and not outlast, the problem in the industry.

For instance, one of the problems relating to consumer dissatisfaction in the computer industry is that of poor information flow. However, as people become accustomed to the presence of computers in their daily lives, the average level of consumer knowledge should increase. Familiarity with computational technology will probably become part of a standard education. Furthermore, as the computer industry matures, it may adjust to the needs of consumers by exploiting the market advantage of providing better information and warranties. Competitive pressure and consumer group pressure will force changes in the industry. Thus, the market inequalities associated with lack of information should disappear, or at least diminish, in time.

In fact, there are already signs of increased consumer satisfaction in the industry. In a recent survey of 4,020 users asked to rate their business mainframe and minicomputer application packages, only six percent of the respondents said they received poor value, and only three percent said their packages did not meet the vendors' promises. The computer consulting and analysis firm that conducted the survey concluded that factors such as manufacturers' inflated but unkept promises are decreasing in importance. Thus, a trend has emerged reflecting increased consumer action in the computer products market.

Furthermore, the software market is beginning to respond to the}

155. A recent Wall Street Journal article discussed the emergence of a new attitude at a major industry trade show. The show reflected the industry's greater focus on customer problems. Kueke, Big Computer Show Ends Hype, Focusses on Reassessment, Wall St. J., June 17, 1986, at 6, col. 2. In addition, user groups are becoming increasingly popular and are playing an important role in the industry by providing inexpensive, reliable information. Bulkeley, User Friendlies, Wall St. J., June 16, 1986, at 24D, col.1; see also, Taylor, Stymied by Software, Wall St. J., May 20, 1985, at 95C, col. 3 ("One of the best—and cheapest—sources of information about both software and hardware is computer-users groups."); Hearings, supra note 5, at 35.
156. The Applications Software Survey, Datamation, May 1, 1985, at 118.
157. "Asked in this study whether vendors kept their promises, 85% said they did and 65% even said their acquisitions met or exceeded vendor promises in all categories, including performance, speed, efficiency, and installation time." Id. at 120.
pressure to provide warranties. In April 1986, ADAPSO, a major software and services industry association, adopted suggested warranty guidelines on packaged software in the absence of negotiated agreements.\(^{158}\) The ADAPSO guidelines recommend the inclusion of: (1) easily readable product specifications, (2) express warranties that “the program will perform substantially in accordance with the published specification statement, the documentation, and authorized advertising,” (3) warranties of sufficient duration to allow for discovery of errors, and (4) repair, replace or refund warranties.\(^{159}\) These guidelines have prompted at least forty software companies to improve their warranties.\(^{160}\) Clearly, the complaints of consumers in the computer industry are not falling on deaf ears; the market is evolving to satisfy consumer demands.

Consumer protection schemes motivated by existing consumer dissatisfaction in the industry should take into account the transience of the problem. Restrictions on the freedom to contract imposed by any rule will be most effective if they diminish proportionately with the increase in market satisfaction.

3. Effect of Rule: Encouraging Disclosure

The optimum solution would also hasten market adjustment to alleviate the problem as soon as possible. In the context of computational technology, this means encouraging bargaining equality by improving the level of consumer knowledge and understanding. Thus, another important consideration in evaluating a legal rule that addresses the sale of computer products is the extent to which it increases the flow of information to consumers. A policy that encourages disclosure of relevant information, rather than promoting the omission of important facts or the spread of misinformation, will have the added, long-run benefit of alleviating the problem and not just treating the symptoms.

III

APPLICATION OF THE THREE CRITERIA TO THE VARIOUS PROPOSED RULES

This Part applies the three criteria of scope, duration and disclosure to the various rules introduced in Part I above. First, the Molina bill will be rejected as too broad, based on the application of the three criteria. Next, the relevant tort law claims will be examined in light of the three

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\(^{159}\) Id.

criteria, and all but the traditional causes of action will be discarded. Finally, this Part will scrutinize several contract doctrines. A modified version of unconscionability will emerge as the doctrine that best satisfies the criteria and thus achieves a balance between consumer protection and free enterprise.

A. Molina Bill

1. Scope

One problem with the Molina bill\textsuperscript{161} is that it would effectively create a six-month period after purchase during which the purchaser could revoke acceptance.\textsuperscript{162} Computer vendors complain that a consumer could bring a suit any time within this period simply because a product does not meet a consumer's advertisement-induced expectations.\textsuperscript{163}

In the fast-moving world of computers,\textsuperscript{164} a six-month "acceptance period" such as this could destroy the market. Illegal copying of software is already an enormous problem in the computer industry.\textsuperscript{165} Industry representatives are concerned that the return policy created by the Molina bill would provide an incentive to purchasers of software to copy programs and then to return them, claiming minor defects or inadequate performance.\textsuperscript{166} Furthermore, computer products, particularly hardware, are often outdated within six months and almost certainly lag behind the forefront of development by that time. Thus, buyers have a strong incentive to return purchases or exchange old models for new. Under the bill, a vendee would be able to purchase a computer system, wait six months, or until a better model appeared on the market, and plead discontent with the old model. The buyer could simply argue, for example, that the product is less efficient than the advertisements had led him to expect.

Even if the consumers were not fraudulently seeking an excuse to return the product for a refund, the vendor would still be in the awkward position of warranting the consumer's expectations. The implications as
to vendor liability for generalizations in advertisements are entirely unclear under the bill.\textsuperscript{167} The warranty created by the advertisement would depend on an interpretation of the generalizations made. Yet, consumer expectations induced by generalizations in advertisements may be based on common misconceptions about computer products. The average consumer (and, thus, the average jury member) may not understand the capabilities of a particular product even when it has been represented fairly in advertising and sales promotions. Vendors could be liable for all sorts of misunderstandings and misreadings of the advertising literature.

Another complaint about the bill is that it does not distinguish between a consumer who is dissatisfied because of a wholly inadequate product and one who is dissatisfied because of a minor difficulty. Manufacturers would therefore be liable for the existence of any minor bugs that disappoint the consumer's expectations, despite the fact that bugs are an inevitability.\textsuperscript{168}

The Molina bill is thus a clear example of an overinclusive legal rule addressed to the problems in the computer industry. It aims to affect most of the industry and every sale of mass-marketed computer technology. It provides warranties for those who could have bargained for them and ignores the parties' desires and the efficiency of the bargained-for burden allocation. In addition, the bill covers minor defects which do not pose a serious threat to even the most disadvantaged of consumers. The Molina bill would thus upset the bargaining process and the allocation of risks in an entire industry in order to alleviate an unfair burden imposed on only a small segment of the consumer population.

2. Duration

In addition, the duration of the proposal is not limited. In twenty years the need for intervention in the computer technology market may have evaporated, yet the law would probably remain in effect.

One can argue that the law could be repealed if and when it becomes unnecessary. However, once the bill is enacted, political realities make it unlikely that the protection afforded consumers by such a bill would subsequently be revoked. If the bill were passed, the industry would probably adjust its development, marketing, manufacturing, and insurance practices to accommodate the bill's requirements. Therefore, if and when the bill's protection were reconsidered by the legislature, the indus-

\begin{itemize}
  \item \textsuperscript{167} "Creative license, routinely accepted in advertising in other industries, will be an expensive and dangerous proposition for computer players in California." \textit{Consumer Activism, BUS. COMPUTER SYS.}, Sept. 1985, 11, 12 (quoting Carlos Frum, chairman of the Association of Better Computer Dealers).
  \item \textsuperscript{168} See supra notes 140-43 and accompanying text.
\end{itemize}
try would probably not exert much pressure. Consumers, on the other hand, would have come to expect those protections in the computer industry and would resent their removal. Legislators would not repeal the law for fear of disenchanting their constituents. Thus, the provisions of the bill would probably remain in effect long beyond their utility, unless amended to include an expiration date or reconsideration provision.

3. Disclosure

Furthermore, it is unclear whether the bill would improve information flow. Computer manufacturers and sellers would probably respond to this market factor by altering their advertising habits. Advertising would have to be carefully reviewed, disclaimers would need to be added, and alterations would be required for the California market. The increased cost of these precautions would inevitably be passed to consumers. The extra cost would not, however, be likely to purchase more information.

Proponents of the bill argue that it would improve the flow of information from manufacturer to consumer because it requires accurate advertisements and sales representations. Industry groups counter that it would decrease the flow of information because manufacturers would be too frightened of their potential liability to say anything. The threat of liability could lead to advertisements that are even less substantive. Thus, while the bill might increase the accuracy of the information disclosed in advertisements, it would probably decrease the quantity of substantive claims made. The net informational benefit is uncertain at best.

B. Tort Claims

1. Fraud

The cause of action for fraud, while consistent with a freedom to

169. See L.A. Daily J., Aug. 8, 1985, at 2, col. 4 (specially designed ad campaigns could be required for California, leading to less information reaching the consumer).

170. Id.

171. See Hearings, supra note 5, at 85-86 (Assembly Member Molina's statement).

172. Myers, End to As-Is Sales?, Datamation, Sept. 15, 1985, at 68, 70 (Alan Foster, legislative counsel to the American Electronics Association argues that vendors would be reluctant to advertise. “Consumers would clearly get less information.”) Cf. Hearings, supra note 5, at 85-86 (even simple statements, e.g., 'we offer color capability,' require prohibitive amounts of testing to insure against liability under the bill).

173. Determining the effect of less information of higher quality is extremely difficult. See G. STIGLER, THE ORGANIZATION OF INDUSTRY 171-88 (1969) (less information available to consumers leads to higher prices and less service; however, economic analysis is incapable of assessing the impact that the quality of information has on the market).
contract analysis, only addresses one portion of the range of problems in which legal intervention is justified. The action for fraud addresses flaws in the bargaining process due to intentional misinformation, but does not deal with other sources of bargaining inequality. Since fraud is a traditional, well-established cause of action, its impact on the market is already felt. This Comment focuses on the remaining problems, those that fraud actions have not cured or cannot cure.

Note, however, that in conjunction with other causes of action, fraud does satisfy the three-point analysis outlined above. First, the cause of action for fraud lies within the scope of the problem because, again, it is only available where the bargaining process is in fact flawed. The cause of action for fraud cannot reach every computer technology transaction problem, but in conjunction with other causes of action could accurately fit the scope of the problem. Second, although the fraud action is available indefinitely, it could not endure longer than the problem because fraud only applies in individual cases where the bargaining process has actually failed. Finally, allowing actions for fraud has a positive effect on disclosure. It discourages the spread of misinformation, but, because it only applies to intentional conduct, it does not discourage information flow in general.

2. Innocent and Negligent Misrepresentation

Unintentional misrepresentation claims have the same effect as suits for breach of express warranty—whatever the vendor represents to the buyer is guaranteed by law. Accordingly, some courts have been disparaging of innocent and negligent—as opposed to intentional—misrepresentation claims. The Fifth Circuit has called contract-related tort claims “redundant and impermissible” where the U.C.C. governs. The Supreme Court of Idaho, holding that any liability for negligent misrepresentation must be pursued in contract, remarked that the economic expectations of parties have not traditionally been protected by tort law, while the U.C.C. explicitly governs such expectations and operates to “ensure that substantial justice results” in the area of economic losses. Where a contractual loss allocation in conformity with the U.C.C. can be

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174. See supra text accompanying note 126.
175. See supra text accompanying notes 71-78.
176. See Clements Auto Co. v. Service Bureau Corp., 444 F.2d 169, 176 (8th Cir. 1971) (innocent misrepresentations and warranties are substantially similar in nature); Mitchell-Lockyer, supra note 83, at 390-91.
177. Earman Oil Co. v. Burroughs Corp., 625 F.2d 1291, 1294 n.10 (5th Cir. 1980) (plaintiff's claim for misrepresentation impermissible).
178. Clark v. International Harvester Co., 99 Idaho 326, 335, 581 P.2d 784, 795 (citing unconscionability provision and good faith requirement as examples of judicial discretion to remedy injustice).
avoided by simply stating an analogous claim in tort for unintentional misrepresentation, the U.C.C. provisions as well as the freedom to contract are undermined.\(^{179}\)

Furthermore, the consumer could then deprive the defendant of significant contract defenses such as the parol evidence rule by bringing the case in tort.\(^{180}\) As one commentator remarked about the tort of innocent misrepresentation:

\[
\text{[I]t should be recognized that the problem relates to the settlement of a contract dispute—to be resolved, as are other such disputes, by a sensitive accommodation of the competing pulls and policies that are peculiar to the area of contracts. Such an accommodation is not likely to be achieved by the imposition of tort liability.}\(^{181}\)
\]

The principles governing breach of contract would have to be abandoned in favor of tort law.\(^{182}\)

A federal court in South Carolina explicitly refused to allow a misrepresentation claim where there were not enough facts to show that the seller's representations were either negligent or fraudulent.\(^{183}\) In other words, the court held that innocent misrepresentation claims are not actionable, although negligent or fraudulent misrepresentation claims might be. The court noted that characterizing defendant's simple breach of warranty as misrepresentation could not transform the facts.\(^{184}\) Absent any factual showing ex delicto, the real nature of the plaintiff's claim was ex contractu.\(^{185}\) Although the computer system at issue did not function as the manufacturer had stated that it would, the plaintiff failed to allege facts that supported a claim of fraud, negligence, careless-

\(^{179}\) Mitchell-Lockyer, \textit{supra} note 83, at 412-13. A special committee on computers and the law formed by the New York City Bar Association studied the use of tort theories in computer litigation and concluded that the traditional distinction between tort and contract should be maintained. I R. Bernacchi, P. Frank & N. Statland, \textsc{Bernacchi on Computer Law: A Guide to the Legal and Management Aspects of Computer Technology} 3-149 (1986).

\(^{180}\) The parol evidence rule provides that when a contract is expressed in an integrated writing, evidence of antecedent understandings and negotiations will not be admitted for the purpose of varying or contradicting the writing. 3 A. Corbin, \textit{Corbin on Contracts: A Comprehensive Treatise on the Rules of Contract Law} § 573 (3d ed. 1960). The rule does not preclude evidence of fraud, duress, or other events that might negate mutuality. S. Williston, \textit{Williston on Contracts} 950 (3d ed. 1961). Thus, under an integrated written contract that did not incorporate representations made during negotiations, the representor could assert the parol evidence rule as a defense to any contract claim based on those representations. Tort claims for misrepresentation, on the other hand, are founded primarily on those unincorporated misrepresentations and hence deprive the representor of the parol evidence defense. Mitchell-Lockyer, \textit{supra} note 83, at 391.


\(^{182}\) Id.


\(^{184}\) Id.

\(^{185}\) Id.
ness, knowledge, or intent on the part of the manufacturer.\textsuperscript{186} Furthermore, the computer was functional, and the buyer continued to use it.\textsuperscript{187} Apparently, the plaintiff sued because he made a bad purchase, but had not allocated the risk of dissatisfaction to the vendor in the purchase contract. Consequently, the court was not receptive to the plaintiff's attempt to alter the contractual allocation of risk.

By contrast, in the well-known case of \textit{Clements Auto Co. v. Service Bureau Corp.},\textsuperscript{188} the Eighth Circuit, applying Minnesota law, affirmed an award to the plaintiff of $450,000 on a claim of innocent misrepresentation even though no breach of warranty, deceitful intent, or negligence was proven.\textsuperscript{189} The vendor made express representations to the buyer, including a statement that the computer system "would constitute an effective and efficient tool to be used in inventory control."\textsuperscript{190} However, the system was not useful for inventory control,\textsuperscript{191} and the buyer relied to his detriment on the seller's representations.\textsuperscript{192} The court held that the vendor was liable because, under Minnesota law, innocent misrepresentation is an actionable claim.

\textit{a. Scope}

The negligent and innocent misrepresentation causes of action are both overinclusive and underinclusive. They are overinclusive in that allowing recovery on these claims effectively creates warranties for vendor representations in all computer sales.\textsuperscript{193} Even transactions that involved explicit bargaining for the exculpatory terms between parties of equal power would be covered by the rule. In other words, allowance of suits for unintentional misrepresentation would unnecessarily restrict the parties' freedom to allocate certain risks by contract. The misrepresentation mode of analysis instead creates a presumption that where misrepresentation occurs, contractual disclaimers are void. This analysis is overinclusive because it not only affects those who cannot bargain adequately, but it imposes a higher standard on the industry as a whole.

In addition, the unintentional misrepresentation rule is underinclusive because not every problematic transaction necessarily involves misrepresentation claims. A consumer could be severely lacking in bargaining power, receive defective merchandise under an unfair contract, yet not have a claim for misrepresentation.

\textsuperscript{186} \textit{Id.} at 46.
\textsuperscript{187} \textit{Id.} at 41.
\textsuperscript{188} 444 F.2d 169 (8th Cir. 1971).
\textsuperscript{189} \textit{Id.} at 177-78, 186.
\textsuperscript{190} \textit{Id.} at 175.
\textsuperscript{191} \textit{Id.} at 174.
\textsuperscript{192} \textit{Id.} at 183-84.
\textsuperscript{193} See supra notes 87-88 and accompanying text.
Some customers simply might not know which questions to ask. For example, a computer purchaser might not understand the difference between the role of the hardware and the role of the software. A consumer might need a system that handles graphics, yet not understand that even though he saw pretty graphics in the store on the machine he bought, the software he chose does not have graphics capabilities. Even worse, there might not be one program that performs all of the tasks he saw demonstrated in the store. Although the vendor may not have misrepresented the capabilities of any of the items, the consumer might well end up owning a tool that is, by itself, useless to him. Thus, not every case of a major defect or disappointment due to unequal bargaining power involves a misrepresentation by the vendor.

b. Duration

Furthermore, a permissive judicial or legislative doctrine regarding misrepresentation claims would endure long beyond the need for intervention in the contracting process. Long after consumers become comfortable with computer technologies, vendors would still be forced to warranty all representations on which the consumer reasonably relies. Although the definition of "reasonably" will change over time with the increase in the average level of knowledge, the doctrine will continue to affect the market. For example, it might still be considered reasonable for a purchaser to rely on statements about a product's basic functions, yet the uncertainty about the utility of the product may be precisely the risk that the parties would like to allocate to the vendee.

c. Disclosure

As with the Molina bill, the misrepresentation rule would probably increase the accuracy of statements by vendors to vendees, but would decrease the overall flow of information. Vendors would be more reluctant to risk liability by making substantive statements to consumers about the capabilities of their products.

Innocent misrepresentation, in particular, does not require a showing of intent, or even negligence. Offending statements may be honest, accurate reflections of the vendor's state of knowledge. Vendors will not be able to distinguish accurately between statements that might expose them to liability and those that will not. As a result, they will be extremely reluctant to make any representations to the buyer at all. Thus, purchasers, particularly those who are uninformed and do not know which questions to ask, will receive even less information than they do now.

194. Supra note 17.
C. Contract Claims

1. Limitations of Remedy and the Essential Purpose Doctrine

Although the computer industry may provide more warranties as the market settles, warranties provided will likely be the standard repair-or-replace variety. The fast pace of development in the industry suggests the potential for abuse of money-back guarantees. Hence, vendors will hesitate to give them. Furthermore, sending a consumer a new program or replacing a defective part is far less expensive than refunding the purchase price, so limited-remedy warranties will probably continue to be common.

The chief consumer protection against contractual limitations of remedy is the "essential purpose" doctrine, which allows free bargaining to allocate risks and remedies between vendors and vendees, but protects consumers from losses that are not related to those bargains. This doctrine allows consumers recourse to any of the remedies provided for in the U.C.C. when the contractually provided remedy fails of its essential purpose. The doctrine applies when the remedy no longer reflects the purpose or intent of the parties, but says nothing about whether the parties entered freely into the bargaining process or whether the resulting remedy provision in the contract was fair.

This type of situation is not peculiar to the current problems in the computer industry. Like fraud, the essential purpose doctrine adequately addresses a particular contractual problem and is necessary for that reason. However, it clearly does not cover the entire scope; some consumers are not given any warranties in their contracts. The problems left unresolved by such doctrines are the focus of this Comment.

2. Limitations on Consequential Damages

A newer doctrine involves the enforceability of clauses limiting consequential damages. The Ninth Circuit recently upheld an award of consequential damages in a computer software sales case despite a contract clause limiting damages. In *RRX Industries v. Lab-Con, Inc.*, the purchase contract for the plaintiff's new software system obligated the defendant to repair malfunctions. Despite some remedial efforts on the part of the defendant, the software never functioned properly. The court found that because the defendants were either unwilling or unable

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195. See J. Soma, supra note 4, at 80-81 (prevalence of repair-or-replace remedy limitations).
196. See supra notes 164-66 and accompanying text.
197. See supra text accompanying note 44.
198. See supra text accompanying notes 174-75.
199. *RRX Indus., Inc. v. Lab-Con, Inc.*, 772 F.2d 543 (9th Cir. 1985).
200. *Id.* at 545.
201. *Id.*
to provide a system that worked as represented, the limited remedy of repair failed of its essential purpose. The court further held that the defendants' breach was so "total and fundamental" that the damages-limitation clause was rendered inoperative.

The key point in the analysis was that a court may alter a bargained-for risk allocation where the breach of contract is so total and fundamental as to cause a loss that is not part of that allocation. In other words, the plaintiff could recover consequential damages despite a damages-limitation clause in the contract because imposing the damages limitation on the buyer was inconsistent with the bargained-for risk allocation. The plaintiffs in RRX did not have to show either bad faith or unconscionability.

Although this ruling seems to reverse a trend of upholding limitations on consequential damages in computer cases, the RRX court cited with approval a case denying consequential damages where the seller "did not ignore his obligation to repair; he was simply unable to perform it." There, the court held that judicial alteration of risk allocation is not appropriate unless a breach of contract is "so total and fundamental as to require that its consequential damage limitation be expunged from the contract." Accordingly, the RRX court hinged its decision on a finding that the breach was total and fundamental.

In analyzing the propriety of consequential damages, the RRX court also cited as precedent Fiorito Bros. v. Fruehauf Corp., which focused its attention on whether the exclusive-remedy provision and the damages limitation were separable elements of the risk allocation bargained for by the parties. In that case the court stated that the purpose of the limited remedy was to avoid consequential damages and that the parties did not intend the two provisions to function independently. According to the court, where the provisions are inseparable and the exclusive remedy fails, imposing the provision limiting damages will upset the bargained-

202. Id. at 547.
203. Id.
204. Although this ruling seems to reverse a trend of upholding limitations on consequential damages in computer cases, the court stated that the award was consistent with its earlier holding in S. M. Wilson & Co. v. Smith Int'l, Inc., 587 F.2d 1363 (9th Cir. 1978). The court noted that in S. M. Wilson it had held that "courts should not alter the bargained-for risk allocation unless breach of contract is so fundamental that it causes a loss which is not part of that allocation." RRX, 772 F.2d at 544 (quoting S. M. Wilson, 587 F.2d at 1375).
205. RRX, 772 F.2d at 547.
206. Id. The court relied on CAL. COM. CODE § 2719(2) (West Supp. 1985), which is the equivalent of U.C.C. § 2-719 and states: "Where circumstances cause an exclusive or limited remedy to fail of its essential purpose, remedy may be had as provided in this code."
208. Id.
209. 747 F.2d 1309 (9th Cir. 1984).
210. Id. at 1315.
for risk allocation. Therefore, the failure of the limited remedy will relieve the buyer of the limitation on damages.\textsuperscript{211}

The Ninth Circuit's decision in \textit{RRX} establishes two methods by which to negate a limitation on consequential damages: 1) show that the limitation is unconscionable, or 2) show that the breach was so total and fundamental that it altered the bargained-for risk allocation (hereinafter "the \textit{RRX} doctrine"). It is not entirely clear whether the \textit{RRX} decision represents a response to the information-flow problem in the computer industry in particular, or a more general modification of the "essential purpose" doctrine.

The former alternative seems more likely because the court appears to address indirectly the buyer's ignorance, a problem which is particularly burdensome in the computer industry. The \textit{RRX} decision hinges on the court's belief that the risk of the vendor being unable to repair the defects was not part of the allocation of risks contemplated at the time of the bargain. However, as Judge Norris argued in partial dissent, such a rule contradicts the U.C.C.'s allowance of limitations on damages.\textsuperscript{212} Such a ruling is tantamount to saying that when the buyer agreed to a limitation on consequential damages, he did not contemplate that the vendor might breach (e.g., by not being able to repair the goods).

Perhaps the court was struggling with the idea that the vendee had no comprehension of how severe the consequences of a breach in a computer sales context could be. Such a lack of comprehension would have limited the vendee's ability to bargain effectively for a consequential damages provision in the first place.

\textit{a. Scope}

The \textit{RRX} doctrine sweeps too broadly by including even those who freely bargained for contractual risk allocation. For example, the doctrine covers the purchaser who bargained for a damage limitation in exchange for a price reduction. The parties may well have contemplated the possibility of a total breach and still decided to limit damages.\textsuperscript{213} Or, they may have been thoughtless rather than ignorant in not contemplating such an event. The \textit{RRX} rule requires no showing that the purchaser unreasonably failed to consider the consequences of a fundamental breach.

In other words, the flaw in the \textit{RRX} rule is that it requires nothing more than a total breach to support a buyer's recovery of consequential

\textsuperscript{211} \textit{Id.}

\textsuperscript{212} \textit{RRX}, 772 F.2d at 550 (Norris, J., concurring in part and dissenting in part).

\textsuperscript{213} This possibility is actually quite likely in the computer industry where small start-ups introduce innovative and experimental technologies, but cannot afford to bear the risk of consequential damages.
damage. Yet, some parties may have valid reasons for placing the burden of consequential damages on the buyer, no matter how severe the breach. Admittedly, this type of allocation may be unfair in some circumstances, for example, where the buyer lacks bargaining power, but \textit{RRX} sweeps too broadly by banning such allocations altogether.

\textbf{b. Duration}

The \textit{RRX} rule is constant over time because it hinges on the vendor's breach and not on the status of the vendee at the time of the bargain. For example, the breach that occurred in \textit{RRX} would still effect the same result twenty years from now. That is, intervening changes in the market might obviate the need to protect the purchaser from the perils of contracting for computer products, yet the breach would still be total and therefore justify recovery of consequential damages under \textit{RRX}.

\textbf{c. Disclosure}

The rule would only minimally improve disclosure. A vendor could avoid liability by warning the buyer of all possible types of breaches and all possible consequences. In the event of breach, the vendor would then be able to argue that the risk of such a breach had, in fact, been contemplated by the buyer. Unfortunately, the vendor probably would not know the buyer's intended uses for the product well enough to predict the consequences of a breach and could not possibly predict all the different ways a product might break down.

Thus, while the outcome in \textit{RRX} may be fair on its facts, it does not provide a beneficial general rule. Perhaps because the court was responding to the plight of (arguably) disadvantaged buyers, it failed to directly address the information-flow problem.

\textbf{3. Unconscionability}

From a sociological perspective, one could view the computer revolution as altering the type of information necessary for one to function adequately in today's society. As Professor of Sociology William Feinberg expressed it, the advent of computers, like any major technological change, has redefined the classes of "inept" and "able" in our society.\footnote{Feinberg, \textit{The Inept and the Computer Revolution: Some Clues from Other Innovations}, 1 \textit{COMPUTERS AND THE SOC. SCI.}, July-Dec. 1985, at 149.} This creates a tension between "the protection of the inept" and "the protection of the group from the inept."\footnote{Id.}

Some members of this new, constantly changing class of inept per...
sons will be ill-equipped to bargain effectively. The doctrine of unconscionability directly addresses the failed assumption of free bargaining. As noted in the Restatement of Contracts:

A bargain is not unconscionable merely because the parties to it are unequal in bargaining position, nor even because the inequality results in an allocation of risks to the weaker party. But gross inequality of bargaining power, together with terms unreasonably favorable to the stronger party, may confirm indications that the transaction involved elements of deception or compulsion, or may show that the weaker party had no meaningful choice, no real alternative, or did not in fact assent or appear to assent to the unfair terms.\(^{216}\)

As a result, findings of unconscionability are fairly rare. Unconscionability achieves a compromise in the tension between protection of the inept and protection of the group from the inept. Some members of the "inept" class are protected, but only from the most unfair contracts. So, too, society is protected because, absent overwhelming procedural or substantive inequity, even the "inept" must fulfill their bargains.

The application of unconscionability doctrine in consumer settings is fairly settled, whereas courts are divided on its applicability in commercial contexts.\(^{217}\) When considering unconscionability claims in commercial contexts, courts presume that the bargain was freely made. In *Earman Oil Co. v. Burroughs Corp.*,\(^{218}\) for example, the Fifth Circuit held that a warranty disclaimer was not unconscionable because the requisite procedural unfairness had not been shown.\(^{219}\) In *Earman*, although the plaintiff alleged that "there was trouble from the start" with Earman's computer system,\(^{220}\) the court upheld the terms of the contract.\(^{221}\) The court noted that Earman did not present any evidence to indicate that it did not freely enter into the contract.\(^{222}\) Thus, Earman could not overcome the presumption that the parties had entered into an arm's length transaction.\(^{223}\)

In *Glovatorium, Inc. v. NCR Corp.*,\(^{224}\) on the other hand, where the purchased computer system did not function as well as a demonstration model, the district court judge found the warranty disclaimer and limitation of consequential damages unconscionable. Judge Schwarzer characterized the case as:

> perhaps a classic case of protecting a purchaser against this kind of con-

\(^{216}\) Restatement (Second) of Contracts § 208 comment d (1979).
\(^{217}\) See supra text accompanying notes 48-69.
\(^{218}\) 625 F.2d 1291 (5th Cir. 1980).
\(^{219}\) Id. at 1299-1300.
\(^{220}\) Id. at 1299.
\(^{221}\) Id. at 1293.
\(^{222}\) Id. at 1299-1300.
\(^{223}\) Id.
\(^{224}\) No. C-79-3393 (N.D. Cal. 1981), aff'd on other grounds, 684 F.2d 658 (9th Cir. 1982).
tract, of the necessity of protecting a purchaser who is innocent of an
appreciation of the consequences of a deficiency . . . .

. . . [A] purchaser who has no experience in computers doesn't have
any inkling of how wrong these things go . . . .

So it seems to me if there is ever reason for holding that these provi-
sions in these contracts should not be enforced because of unconsciona-
bility, this is the A-number one case.225

On appeal, the Ninth Circuit declined to discuss unconscionability and
instead affirmed the award on grounds of fraud.226 Nevertheless, the trial
judge's comments exemplify a judicial trend of increasingly liberal appli-
cation of the doctrine of unconscionability.227 In the future, then, dissi-
satisfied consumers who lack sufficient bargaining power might be able to
argue unconscionability successfully.

In Chatlos Systems, Inc. v. NCR Corp.,228 the Third Circuit applied
unconscionability analysis to a commercial transaction for computer
products,229 but found no unconscionability because the parties were of
relatively equal sophistication.230 The court stated that there was no
great disparity in the parties' bargaining power because the plaintiff was
"a manufacturer of complex electronic equipment, [and] had some
appreciation of the problems that might be encountered with a computer
system."231

In Glovatorium the court focused on the plaintiff’s inability to com-
prehend "how wrong things can go" when a computer system malfunc-
tions.232 In Chatlos, on the other hand, the court noted that the plaintiff
had an understanding of computer problems.233 The concern seems to be
that some consumers are not informed enough to be able to bargain in
the context of the sale of computer products. The doctrine of unconscio-
nability thus addresses the failure of the free-bargaining assumption and
should satisfy the three criteria used in this Comment to analyze the vari-
ous legal rules.

a. Scope

The scope of the doctrine of unconscionability coincides with the
scope of the problem in the computer industry. Recovery on a claim of
disparity of bargaining power will be rare. Large companies will not be

225. Id., Reporter's Transcript of Proceedings at 6-7.
226. Glovatorium, Inc. v. NCR Corp., 684 F.2d 658, 660-61 (9th Cir. 1982).
227. See Warranty Disclaimers, supra note 14, at 538.
228. 635 F.2d 1081 (3d Cir. 1980).
229. Id. at 1086-87.
230. Id. at 1087.
231. Id.
233. 635 F.2d at 1087.
able to recover on an unconscionability theory because they possess su-
preior economic power; they can hire experts. Only where the parties to a
contract have grossly unequal bargaining power, and the resultant con-
tract terms unreasonably favor the stronger party, will the buyer be able
to recover.234

Furthermore, the substantive element of unconscionability can be
used to rule out claims based on minor defects. Even where the proce-
dural element is present, a consumer would still have to show that the
contract was unreasonably favorable to the vendor.235 Contractual allo-
cations of risk would not be disturbed where consumers incur only minor
losses. This doctrine would limit the imposition of unnecessary restric-
tions on the freedom to contract by limiting the frequency of judicial
modification of contracts. Thus, unconscionability doctrine covers pre-
cisely the problem areas in the computer industry—where free bargain-
ing fails because major defects or failed expectations substantially impair
the value of a product purchased by a procedurally disadvantaged
consumer.

b. Duration

As consumers become more sophisticated, the availability of the
unconscionability theory will diminish. Since the rule focuses on the sta-
tus of the consumer in relation to the vendor, the rule will recede as
information flow increases.

c. Disclosure

Finally, the doctrine of unconscionability will encourage disclosure.
 Silence on the part of the vendor will not vitiate liability, because the
document focuses on the consumer's level of knowledge and sophistica-
tion, not the vendor's representations. It will be to the vendor's advan-
tage to inform the buyer and thereby cure the consumer's lack of
computer sophistication. Furthermore, vendors will be encouraged to
provide information in clear, simple language that people without any
previous experience with computers can understand. This information
will hasten society's adjustment to computer technology and expand the
quality and quantity of information available to the public.

CONCLUSION

Courts and legislators have begun to acknowledge that there are

234. For example, consider the owner of a small hardware store with no experience or training
in computers, who must computerize his business to remain competitive. If he buys a computer
product aimed at first-time users that destroys data, but the contract provides no warranties and
contains a consequential damages limitation, an unconscionability remedy would be appropriate.

235. See Restatement (Second) of Contracts, § 208 comment d (1979).
many dissatisfied purchasers of computer products, and they have pos-
itied a number of methods for protecting consumers. Most of the pro-
posed solutions sweep too broadly and interfere with the parties' ability
to contract freely.

Legislation mandating warranties for computer products prevents
the consumer from choosing not to purchase a warranty with the prod-
uct in exchange for a reduced price, placing unnecessary economic bur-
dens on both consumers and industry. Allowing unintentional tort claims
in a contract setting has the same effect because it creates warranties
imposed by law and undermines the U.C.C.

In general, the market should be left to regulate itself, and it will
improve with time. The computer industry is young, and computers
were only recently introduced into the mainstream, American market-
place. On the other hand, poor information flow entitles consumers to
some protection. Unconscionability theory offers a temporary mecha-
nism sufficiently constrained to be fair without interfering unnecessarily
with the operation of the market.

Because of the limited scope of the unconscionability doctrine, many
dissatisfied consumers may be bound by the terms of their contracts.
Reasonably sophisticated consumers who have no warranty in their con-
tract will go unprotected except where they can show fraud. That, how-
ever, is entirely consistent with a free market. In a system where people
are free to contract, those who have adequate bargaining power must
shoulder the burden of a fairly reached but disadvantageous agreement.
Although in an ideal world every purchase would be advantageous to
both parties, we should not attempt to guarantee consumer satisfaction in
every transaction for computer products by limiting the range of permis-
sible transactions. Rather, the current technological revolution presents
society with a different challenge: how to promote the average level of
bargaining power to ensure more satisfactory transactions in the future.

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