Defective Information: Should Information Be a Product Subject to Products Liability Claims

Joseph L. Reutiman
NOTE

DEFECTIVE INFORMATION: SHOULD INFORMATION BE A "PRODUCT" SUBJECT TO PRODUCTS LIABILITY CLAIMS?

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Numerous consumer goods, including books, computer software, and commercial GPS devices, contain a significant informational component. How should the law respond when the information contained in such products is inaccurate and causes personal injury? In the products liability arena, courts have traditionally been hostile to such claims and have barred recovery on the basis that information is not a "product" because of its intangible nature.

This tangibility test has outlived its usefulness. The cases applying this test have twisted the definition of product beyond recognition. Furthermore, as technology progresses, consumers are increasingly exposed to products containing potentially defective information that do not neatly fit within the tangible-intangible paradigm.

This Note calls upon courts to treat information as a product and utilize the concept of duty as a means for controlling the extent of information-related liability. This duty-based approach is flexible enough to reconcile the concerns surrounding liability for defective information with the policy goals of the products liability system.

INTRODUCTION ............................................... 182
I. THE POLICY GOALS OF PRODUCTS LIABILITY ............. 183
II. THRESHOLD ISSUES IN PRODUCTS LIABILITY & THE RISE OF THE TANGIBLE-INTANGIBLE DISTINCTION ............ 186
   A. Aeronautical Charts ........................................ 188
   B. Winter v. G.P. Putnam's Sons ........................... 191
   C. The Tangible-Intangible Distinction in Other Contexts .................................. 194
III. INFORMATION AS A PRODUCT: A BETTER METHOD ...... 196

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INTRODUCTION

The widespread adoption of products liability has fundamentally altered American tort law. In delineating the boundaries of this system, courts have struggled with the question of what constitutes a “product” for purposes of products liability. One problematic sub-issue in this area is whether information constitutes a product and, if so, whether marketing “defective” information exposes providers of information to products liability claims. Many of the courts that have addressed this issue have answered it in the negative, reasoning that information cannot be a product because of its intangible nature. Yet, these courts have not been entirely consistent in applying this tangible–intangible distinction. For example, when confronted with the difficult line-drawing problems this approach creates, several courts have held that the information displayed in some physical media (e.g., aeronautical charts) is a product. In actuality, these courts are grappling (with varying degrees of self-awareness) with the problem of how to promote the policy goals of products liability while still maintaining the free flow of information. Fearful of the deleterious effect products liability claims could potentially have on the “free market of ideas,” these courts have struggled to find a theoretical distinction between information and other types of consumer

1 See William L. Prosser, The Fall of the Citadel (Strict Liability to the Consumer), 50 MINN. L. REV. 791 (1966) (describing the history of products liability in American tort law and the system’s theoretical basis); see also A. Mitchell Polinsky & Steven Shavell, The Uneasy Case for Product Liability, 123 HARV. L. REV. 1437 (2010) (arguing that the policy rationales supporting products liability are weak for a variety of products).


3 The term “defective” as applied to marketed information means, for purposes of this Note, information that is inaccurate or misleading. The issue addressed in this Note should not be confused with failure-to-warn actions, which are sometimes labeled as “informational defect” claims.


goods. In doing so, they have placed undue emphasis on the definition of product.

This Note asks courts to cease approaching this problem from the perspective of whether or not certain forms of defective information are products because this approach has led to incoherent and untenable results. Instead, courts should treat information incorporated into physical media as part of the product and apply a duty-based analysis to limit the scope of liability for defective information. This approach is more conceptually elegant and allows courts greater control in shaping the extent of liability in situations involving defective information. Not only will this approach result in more consistent results, it will also advance the policy goals of products liability by ensuring a beneficial risk allocation while avoiding undue interference into the free market of ideas. Since this approach incorporates existing products liability principles, it does not represent a major doctrinal shift but instead requires courts to proceed in the same manner as they would in ordinary products liability litigation.

Part I of this Note introduces the theoretical background of products liability law in the United States and discusses the policy goals this system hopes to achieve. Part II describes the development of the tangible-intangible distinction for determining whether information is treated as a product for purposes of products liability and illustrates how courts have not been entirely true to the logic of this test in the contexts of printed material, aeronautical charts, and electronic devices. Finally, Part III argues that this issue can be satisfactorily resolved by presuming marketed information is a product with courts applying ordinary tort law duty principles. Because allegedly defective information implicates various special concerns, public policy considerations will generally compel active pretrial policing of claims under the concept of duty and result in a finding of no liability as a matter of law.6

I. THE POLICY GOALS OF PRODUCTS LIABILITY

Public policy considerations have driven the widespread adoption of liability in tort for product-caused harm. Beyond recognition of products liability as a distinct field of tort, public policy has also played a significant role in determining how far liability under this system should extend. Therefore, in assessing whether information should be considered a product, it is necessary to understand the policy goals of products liability.

6 See Restatement (Third) of Torts: Liability for Physical and Emotional Harm § 7 (2010).
In his concurrence in *Escola v. Coco-Cola Bottling Co.*, Justice Roger Traynor gave one of the earliest expositions of the policy goals behind the imposition of strict liability for defective products. Unsatisfied with the efficacy of the doctrine of res ipsa loquitur in the context of product-caused personal injury as a means for enabling a plaintiff to show defect via circumstantial proof, Justice Traynor suggested that product manufacturers should instead be held strictly liable for the harm caused by the goods they release into the marketplace. Justice Traynor articulated several policy justifications for the imposition of strict liability that later courts have found compelling.

First, Justice Traynor argued that “public policy demands that responsibility be fixed wherever it will most effectively reduce the hazards to life and health inherent in defective products that reach the market.” Second, he noted that losses falling on a single individual can be devastating and that the imposition of strict liability would have a significant insurance effect by preventing the additional costs that occur when one person alone bears the burden of an accident. The premiums of this insurance would be “distributed among the public as a cost of doing business.” Third, he argued that since there is a persistent risk of even non-negligently caused defects, there should be “general and constant protection and the manufacturer is best suited to afford such protection.”

Although Justice Traynor ultimately persuaded the California Supreme Court to adopt strict products liability because of these policy considerations, his analysis remains unsatisfactory with regard to several of the justifications presented in his *Escola* concurrence. First, it is not immediately apparent that shifting from negligence-based liability to strict liability will compel manufacturers to invest in additional resources necessary to prevent defective products from reaching the market. Under a negligence scheme, manufacturers will theoretically allocate resources to prevent those defects that are worth preventing; in effect, they will invest in care up to the point at which they can no longer be found liable

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7 *See* 150 P.2d 436, 440 (Cal. 1944).
8 *See id.* at 441.
10 *Escola*, 150 P.2d at 440.
11 *See id.* at 441.
12 *Id.*
13 *Id.*
for negligence. Under a negligence-based system, the costs of accidents that are not worth preventing—so-called residual accident costs—will be borne by the individuals upon whom such costs fall. Theoretically, a manufacturer's investment decision will not change under a strict liability system—a rational manufacturer will still invest in care up to the same point as in a negligence-based system, i.e., to the point where the savings in accident costs justifies the marginal expenditure in safety, because it will be cheaper for the manufacturer to simply pay additional accident costs than to invest in more care. The difference between the two systems is that the manufacturer, rather than the consumer, will bear the residual accident costs under a strict liability system. Therefore, Justice Traynor's claim that moving to a strict liability system will increase product safety is questionable.

Second, because strict liability does not increase overall product safety, Justice Traynor's assertion that a manufacturer is in the best position to protect consumers from even non-negligently-caused defects is troublesome. Once a product causes injury to a consumer, there is nothing left for the manufacturer to protect the consumer against—the damage has been realized and the issue becomes who should bear the ultimate costs of the accident.

Justice Traynor's final policy concern, however, provides a strong justification for the imposition of strict liability because strict liability can theoretically provide an effective insurance system for defect-caused harm. Under this system, the manufacturers held liable for residual accident costs function as insurers of product users harmed by defects. This insurance system is viable because the risks insured against are ascertainable ahead of time and it effectively avoids the problems of adverse selection and moral hazard. Since insurance is tied to each product sold, individual purchasers cannot decide whether they want insurance coverage or not. This means that although the risk of loss might differ between two product users, low-risk individuals are not able

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15 See, e.g., A. MITCHELL POLINSKY, AN INTRODUCTION TO LAW AND ECONOMICS 99–100 (2d ed. 1989).
16 See THOMAS J. MICELI, THE ECONOMIC APPROACH TO LAW 45 (2d ed. 2009).
17 Id. at 44.
18 Id.
20 See generally Steven Shavell, On Liability and Insurance, 13 BUL. J. ECON. 120 (1982) (examining the effect of liability rules, including negligence and strict liability, on insurance incentives in first- and third-party insurance policies).
21 See MICELI, supra note 16, at 44.
23 See id. at 502.
to leave the pool and cause the entire pool to unravel. Furthermore, because the defect must have existed at the time the product entered into the marketplace and recovery in most jurisdictions in situations of product misuse is restricted by principles of comparative fault, individuals have a limited ability to alter risk levels post-distribution.

Beyond Justice Traynor’s insight, a strict liability system has the ability to affect consumption levels. Since the insurance imposed through strict liability will often be passed on to consumers in the form of higher prices, in theory, aggregate demand should decrease and the total amount of product-caused harm will decrease accordingly. Furthermore, strict liability also has a significant process effect: it reduces transaction costs by simplifying the proof necessary for an individual to recover on a claim. Liability without fault decreases the costs associated with proving negligence and helps speed up the adjudication of claims.

Given these underlying policy concerns, any proposal to alter the products liability system—especially the threshold issue of what products are included—must consider the impact such an alteration would have on achieving the system’s policy goals. Contrary to intuition, broad liability without fault will not compel manufacturers to invest more resources in making their products safer. The real benefits of the product liability system arise through the reduction of transaction costs associated with prosecuting claims as well as imposing a viable insurance effect.

II. Threshold Issues in Products Liability & the Rise of the Tangible–Intangible Distinction

The advent of strict liability for the manufacture and distribution of defective products has created significant threshold issues regarding

24 However, consumers may, of course, choose not to purchase the product at all.
25 See Priest, supra note 22, at 501–02.
26 See ROBERT COOTER & THOMAS ULEN, LAW & ECONOMICS 358 (3d ed. 2000) (“The conclusion we draw is that strict liability with the defense of assumption of the risk and product misuse is an efficient standard for minimizing the social costs of product-related injuries. The absence of these defenses compels manufacturers to offer insurance with their product, probably an inefficient outcome.”).
28 See id. at 933.
29 See id.
30 Id.
32 However, as a matter of public policy, most courts have held that while the products liability system imposes a beneficial insurance effect, manufacturers and distributors should not be treated as general insurers of their products and the concept of defect should serve as a limiting principle for liability. See infra Part III.
which claims are, and which are not, included in the products liability system. These issues are incredibly important to litigants, as they may ultimately prove dispositive of a particular claim. For example, a plaintiff whose claim falls outside the boundaries of the products liability system is generally denied the benefit of strict liability and must instead prove fault under a negligence theory or attempt to show the breach of an express or implied warranty. Proving negligence can be an impossible proposition in certain cases where evidence has been destroyed because of the product defect itself or misfeasance on the part of the defendant and can potentially result in the complete denial of recovery. Furthermore, sophisticated liability-conscious manufacturers and distributors are wary of providing statements with their products that could be construed as creating an express warranty.

One significant threshold issue in this area is what constitutes a product for purposes of products liability. Although a few jurisdictions have chosen to legislatively define the term product, most have instead relied on courts to handle the issue. In approaching this problem, the second and third Restatement of Torts provide a useful starting point. While the Restatement (Second) of Torts failed to provide a concrete definition, the Restatement (Third) of Torts takes the position that a prod-

34 See id. at 40–51 (discussing negligence and warranty as alternate theories of liability).
37 See, e.g., Idaho Code Ann. § 6-1402(3) (2008) (defining a product as “any object possessing intrinsic value, capable of delivery either as an assembled whole or as a component part or parts, and produced for introduction into trade or commerce. Human tissue and organs, including human blood and its components, are excluded from this term.”); Md. Code Ann. Cts. & Jud. Proc. § 5-115(a)(4) (LexisNexis 2006) (defining a product as “a tangible article, including attachments, accessories, and component parts, and accompanying labels, warnings, instructions, and packaging.”); Wash. Rev. Code Ann. § 7.72.010(3) (West 2010) (defining a product as “any object possessing intrinsic value . . . produced for introduction into trade or commerce.”).
38 See, e.g., Winter v. G.P. Putnam’s Sons, 938 F.2d 1033, 1034 (9th Cir. 1991) (reasoning that the inherently physical nature of the items supports the notion that products must be tangible).
39 See RESTATEMENT (SECOND) OF TORTS § 402A (1965). To the extent the Restatement (Second) of Torts addresses the issue, comment d to section 402A states:

The rule stated in this Section is not limited to the sale of food for human consumption, or other products for intimate bodily use, although it will obviously include them. It extends to any product sold in the condition, or substantially the same condition, in which it is expected to reach the ultimate user or consumer. Thus the rule stated applies to an automobile, a tire, an airplane, a grinding wheel, a water heater, a gas stove, a power tool, a riveting machine, a chair, and an insecticide. It applies also to products which, if they are defective, may be expected to and do cause only “physical harm” in the form damage to the user’s land or chattels, as in the case of animal food or a herbicide.
uct is “tangible personal property.” While this definition is adequate for the vast majority of situations, it can pose difficult conceptual problems when applied to marketed information; in particular, there is the issue of whether information found in admittedly tangible forms of physical media should be considered separately the rest of the product. Most courts addressing the issue have been willing to consider information as separate from the physical media in which it is contained.

A. Aeronautical Charts

Early decisions grappling with the issue of information as a product embraced the notion that information found within aeronautical charts is a product for purposes of products liability. While these opinions agree that aeronautical charts are products, the policy implications underlying this result are often obscured or inadequately addressed.

In *Aetna Casualty and Surety v. Jeppesen & Co.*, a Bonanza Airlines airplane crashed while approaching Las Vegas, Nevada, killing all passengers on board. The pilot of the aircraft relied on a Jeppesen instrument approach chart graphically depicting “all pertinent aspects of the approach such as directional headings, distances, minimum altitudes, turns, radio frequencies and procedures to be followed if an approach is missed.” The Court of Appeals for the Ninth Circuit, the first appellate court to squarely address this issue, explicitly rejected the defendant’s contention that the approach chart did not constitute a product, noting:

> Jeppesen acquires [FAA approach data] and portrays the information therein on a graphic approach chart. This is Jeppesen’s “product.”

While the information conveyed in words and figures on the Las Vegas approach chart was completely correct,

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*Id. at cmt. d.*

40 *See Restatement (Third) of Torts: Products Liability* § 19 (1998). Comment d of this section further explains:

> Although a tangible medium such as a book, itself clearly a product, delivers the information, the plaintiff’s grievance in such cases is with the information, not with the tangible medium. Most courts, expressing concern that imposing strict liability for the dissemination of false and defective information would significantly impinge on free speech have, appropriately, refused to impose strict products liability in these cases.

*Id. at cmt. d.*

41 *See infra* Part II.B.

42 *See id.*


44 *See Aetna*, 642 F.2d at 341.

45 *Id.* at 341–42.
the purpose of the chart was to translate this information into an instantly understandable graphic representation.

The trial judge found that the Las Vegas chart "radically departed" from the usual representation of graphics in the other Jeppesen charts; that the conflict between the information conveyed by words and numbers and the information conveyed by graphics rendered the chart unreasonably dangerous and a defective product.46

The court's conclusion in this case is striking for several reasons. First, the court's decision is entirely devoid of any explanation for holding that the Jeppesen's chart constitutes a product—the court simply posits this as fact.47 Second, the court concedes that the information in the instrument approach chart was factually accurate.48 Instead of basing liability on the accuracy of the information in the chart, however, the court found a defect solely because the chart presented information in a misleading manner; in effect, the court allowed liability on the basis of defective design.49 This decision remains anomalous. Other courts have refrained from applying concepts of design defect to situations involving defective information.50

Two years later, in Saloomey v. Jeppesen & Co., the Court of Appeals for the Second Circuit also found aeronautical charts to be products.51 At issue in Saloomey was a Jeppesen area chart52 that erroneously indicated that the Martinsburg, West Virginia airport was equipped with a full instrument landings system.53 In finding the mislabeled chart to be a defective product, the court reasoned that

[b]y publishing and selling the charts, Jeppesen undertook a special responsibility, as seller, to insure that consumers will not be injured by the use of the charts; Jeppesen is entitled—and encouraged—to treat the bur-
den of accidental injury as a cost of production to be covered by liability insurance. . . .

Appellant's position that its navigational charts provide no more than a service ignores the mass-production aspect of the charts . . . . [T]he mass production and marketing of these charts requires Jeppesen to bear the costs of accidents that are proximately caused by defects in the charts.54

While the court correctly recognized the insurance rationale underlying the imposition of liability, this alone does not provide an adequate explanation for why information represented in the form of an aeronautical chart should be considered a product. For example, as the appellant in Saloomey argued, courts have consistently attempted to draw a line between products and services.55 Courts have refused to hear products liability claims for services despite the argument that the insurance rationale behind the imposition of strict liability is no less compelling in situations involving services.56 The fact that certain costs can be shifted to another party cannot alone serve as the defining characteristic for what is or is not a product.

Furthermore, the court's focus on the concept of mass production is problematic as well.57 Neither the quantity of production nor the mass marketing of a particular item is the defining characteristic of a product.58 A particular consumer good should not cease to be a product for purposes of products liability simply because it is custom-made for a particular consumer or because it is not produced in mass quantities and widely distributed to numerous markets.59 By focusing on the fact that the charts were mass-produced, the court ignored the true issue raised by the case: how to craft a workable definition of product that will include a case such as this because the court believes that public policy demands that printers of aeronautical charts compensate those who reasonably rely

54 Id. at 676–77.
55 See id. at 676; see also Restatement (Third) of Torts: Products Liability § 19(b) (1998) ("Services, even when provided commercially, are not products.").
57 See Andrew T. Bayman, Note, Strict Liability for Defective Ideas in Publications, 42 Vand. L. Rev. 557, 573 (1989) (arguing that the court’s emphasis on mass production would just as easily apply to books and magazines).
58 However, these factors are properly considered with regard to another threshold question in products liability: whether the seller of the product is "[o]ne engaged in the business of selling or otherwise distributing products." See Restatement (Third) of Torts: Products Liability § 1 cmt. c (1998).
59 See, e.g., Sprung v. MTR Ravenburg, Inc., 788 N.E.2d 620, 624 (N.Y. 2003) (finding a defendant sheet metal manufacturer liable for a defective retractable floor despite the fact that the manufacturer had only produced one such floor).
on erroneous information contained within their products when such reliance ultimately results in the death of the user.

B. Winter v. G.P. Putnam’s Sons

Despite early recognition that aeronautical charts are products, in Winter v. G.P. Putnam’s Sons the Court of Appeals for the Ninth Circuit shifted away from the notion that information can constitute a product.\(^6^0\) In Winter, the plaintiffs purchased a copy of The Encyclopedia of Mushrooms, a reference guide containing information on the habitat, collection, and cooking of mushrooms.\(^6^1\) The plaintiffs subsequently became seriously ill after ingesting several mushrooms that the guide indicated were safe to eat and sued the defendant publisher under strict products liability.\(^6^2\)

The Ninth Circuit grappled with the issue of whether the inaccurate information regarding poisonous mushrooms could be considered a defective product and thereby sustain the plaintiffs’ products liability claim.\(^6^3\) The court began its analysis by positing a distinction between tangible and intangible items that would become the dominant justification for treating commercially sold information as outside the products liability system:

A book containing Shakespeare’s sonnets consists of two parts, the material and print therein, and the ideas and expression thereof. The first may be a product, but the second is not. The latter, were Shakespeare alive, would be governed by copyright laws; the laws of libel, to the extent consistent with the First Amendment; and the laws of misrepresentation, negligence, and mistake. These doctrines applicable to the second part are aimed at the delicate issues that arise with respect to intangibles such as ideas and expression. Products liability law is geared to the tangible world.\(^6^4\)

While recognizing that the physical book was a product, the court nevertheless refused to allow liability for personal injury resulting from any inaccurate or misleading information contained within the book.\(^6^5\)

In reaching this conclusion, the court faced the plaintiffs’ contention that the printed information in The Encyclopedia of Mushrooms is not conceptually different from the instrument approach data found in aero-

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60 See Winter v. G.P. Putnam’s Sons, 938 F.2d 1033, 1036 (9th Cir. 1991).
61 See id. at 1034.
62 See id.
63 See id.
64 Id.
65 See id. at 1036.
nautical charts because both items contain representations of natural features and both are intended for use during a hazardous activity. Surprisingly, the court attempted to distinguish the information found in aeronautical charts from information found in books such as The Encyclopedia of Mushrooms:

Aeronautical charts are highly technical tools. They are graphic depictions of technical, mechanical data. The best analogy to an aeronautical chart is a compass. Both may be used to guide an individual who is engaged in an activity requiring certain knowledge of natural features. Computer software that fails to yield the result for which it was designed may be another. In contrast, The Encyclopedia of Mushrooms is like a book on how to use a compass or an aeronautical chart. The chart itself is like a physical "product" while the "How to Use" book is pure thought and expression.

However, in making this assertion, the court undermined the tangible-intangible distinction that it had previously established. Technical data published in physical media is just as intangible as non-technical information—both aeronautical charts and books are physical media containing intangible information. Adding a "highly technical" exception to the tangible-intangible distinction introduces difficult line-drawing problems to what the court suggested would be a bright-line test.

The court's analogy between an aeronautical chart and a compass is also unpersuasive. The plaintiffs in Winter relied on the encyclopedia as guide to various immutable characteristics of the natural world in the same manner they would a chart or compass. While the court asserts that the encyclopedia is merely a "How to Use" guide for the collection and preparation of mushrooms, it is difficult to see how the instrument approach charts at issue in Aetna are not similarly "How to Use" guides for operating an aircraft during a particular landing approach. In fact, the court in Aetna noted that the charts at issue expressly provided "procedures to be followed if an approach is missed," thereby making them even more similar to a "How to Use" guide in terms of function.

66 See id. at 1035–36.
67 Id. at 1036 (emphasis in original).
68 See supra note 64 and accompanying text.
69 See Winter, 938 F.2d at 1035.
70 See Schultz, supra note 49, at 446 (criticizing the Winter court's analogy).
71 See supra notes 61–62 and accompanying text.
72 See supra note 67 and accompanying text.
The true motivation for the court's holding that the informational content of *The Encyclopedia of Mushrooms* is not a product becomes apparent in the court's discussion of the competing policy goals at play in this situation.74 While recognizing that spreading the costs of injuries is a desirable policy, the court asserted:

> [t]he threat of liability without fault (financial responsibility for our words and ideas in the absence of fault or a special undertaking or responsibility) could seriously inhibit those who wish to share thoughts and theories . . . .

Strict liability principles even when applied to products are not without their costs. Innovation may be inhibited. We tolerate these losses. They are much less disturbing than the prospect that we might be deprived of the latest ideas and theories.75

Therefore, the Ninth Circuit believed that maintaining the free market of ideas overcomes the policy goals of the products liability system.

Despite the court's recognition of these competing policy interests, however, its reasoning remains unsatisfying. First, it is difficult to see how the free exchange of ideas is threatened by liability for erroneous printing information with regard to poisonous mushrooms but not aeronautical charts. As the plaintiffs pointed out,76 both forms of information attempted to describe characteristics of the natural world. Furthermore, the value of both products to a consumer depends on the accuracy of the information provided.77 The court, therefore, elevated one type of information above the other without sufficiently distinguishing the two.

Second, the court's assertion78 that society tolerates the losses liability may cause with regard to “innovation,” but that “ideas and theories” deserve greater protection is also puzzling. Product innovation surely incorporates ideas and theories—enhanced or entirely new types of consumer products are often derived from advances in science and technology. If a particularly groundbreaking product must be recalled or never reaches market because of the burden our product liability system has placed on the manufacturer, consumers have necessarily been deprived of the latest ideas and theories. Furthermore, it is difficult to see how the depiction of various types of mushrooms necessarily falls within the category of ideas and theories that demand greater protection. The court

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74 See Winter, 938 F.2d at 1035.
75 Id.
76 See supra note 71 and accompanying text.
78 See supra note 75 and accompanying text.
provides no method for determining what information constitutes an idea or theory worthy of heightened protection.

C. The Tangible–Intangible Distinction in Other Contexts

The tangibility concept articulated by the court in Winter has extended to products other than printed materials. In particular, courts have begun to apply the tangible–intangible test to consumer electronic devices containing a substantial informational component. Three contexts where courts have already applied the tangibility test or where the test will likely have a significant impact are video games, commercial GPS devices, and computer software.79

Courts have readily applied the tangibility test in the context of video games. In Wilson v. Midway Games, Inc., for example, the court was faced with the question of whether the content of a video game could expose the game manufacturer to claims of strict products liability.80 The plaintiff in Wilson argued that the video game Mortal Kombat was defectively designed because the game made players feel as though they were physically performing the acts of violence depicted in the game.81 The plaintiff further argued that the game was "mentally-addictive" and encouraged players to perform similar acts of violence in real life.82

In dismissing the plaintiff's products liability claims, the court invoked the tangible–intangible test and declared that "Mortal Kombat is not sufficiently different in kind [from motion pictures or television programs] to fall outside the 'intangible' category that is demarcated in the case law . . ."83 In essence, the threat of runaway liability in the context of expressive media was too much for the court to tolerate. Other courts addressing products liability claims in the context of video games have reached similar conclusions.84

The issue of defective information also potentially arises in the growing field of commercial GPS devices.85 Although no court has squarely addressed the issue, the tangible–intangible distinction may not play a dispositive role in this context because such GPS devices are ar-

79 See infra notes 82–93 and accompanying text.
81 See id. at 173.
82 See id.
83 Id. at 174.
85 See generally John E. Woodard, Oops, My GPS Made Me Do It!: GPS Manufacturer Liability Under a Strict Products Liability Paradigm When GPS Fails to Give Accurate Directions to GPS End-Users, 34 U. Dayton L. Rev. 429 (2009) (arguing that products liability is the most appropriate cause of action for injuries due to faulty GPS directions).
guably a sales-service hybrid.\(^8\) If courts are inclined, they may apply existing rules governing transactions that consist of the sale of a product combined with professional services and conclude that commercial GPS services are more appropriately treated as services and therefore fall outside the products liability system.\(^7\) Even if, however, a court were to determine that the product-like aspect of GPS devices predominates, it appears likely, given the treatment of erroneous information in the context of print media, that a court would nonetheless conclude that any erroneous informational content delivered to a GPS device that ultimately causes harm is separable from the physical GPS device itself and is therefore not “tangible” enough to constitute a product.

Finally, potential liability stemming from computer software also tests the tangible-intangible distinction.\(^8\) Although civil claims regarding computer software have sometimes been brought under the Uniform Commercial Code in the context of purely economic losses,\(^9\) such claims could instead be framed by using product liability terminology when defective software results in personal injury.\(^8\) Those courts that have determined whether computer software is a “good” under the Uniform Commercial Code have struggled to apply a tangible-intangible distinction and have reached conflicting conclusions.\(^9\) Such courts have tended to focus on the service-like aspects of a software sale as compared to the tangible aspects of the software medium.\(^9\) Courts applying this

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\(^8\) See id. at 445–52.

\(^7\) See, e.g., Ferrari v. Grand Canyon Dories, 32 Cal. App. 4th 248, 259 (Cal. Ct. App. 1995) (holding that a commercial provider of white water rafting tours provided a service and therefore could not be found liable as the lessor of a defective raft); Linden v. Cascade Stone Co., 699 N.W.2d 189, 193–94 (Wis. 2005) (applying a “predominate purpose” test to conclude that a contractor provided a product rather than a service).

\(^8\) See, e.g., Winter v. G.P. Putnam’s Sons, 938 F.2d 1033, 1036 (9th Cir. 1991) (stating in dicta that “[c]omputer software that fails to yield the result for which it was designed may be” an item subject to products liability). It is difficult to see how the Winter court could reach this conclusion under its tangible-intangible approach. Computer software is more intangible than the aeronautical charts at issue in that case.


\(^9\) See Seldon J. Childers, Note, Don’t Stop the Music: No Strict Products Liability for Embedded Software, 19 U. Fla. J.L. & Pub. Pol’y 125, 140 (2008) (noting that there is very little tort law regarding computer software); see also RESTATEMENT (THIRD) OF TORTS: PRODUCTS LIABILITY § 19 cmt. d (1998) (“When a court will have to decide whether to extend strict liability to computer software, it may draw an analogy between the treatment of software under the Uniform Commercial Code and under products liability law.”).

\(^9\) Compare Wachter Mgmt. Co., 144 P.3d at 755 (finding that computer software constitutes a good and not a service), with Data Processing Serv. v. L.H. Smith Oil Corp., 492 N.E.2d 314, 319 (Ind. Ct. App. 1986) (finding that a data processing system constituted a service rather than a good).

\(^9\) See Data Processing Serv., 492 N.E.2d at 319 (“While a tangible end product, such as floppy disks, hard disks, punch cards or magnetic tape used as a storage medium for the program may be involved incidentally in this transaction, it is the skill and knowledge of the
analysis generally consider software to be a service when the software in question was developed specifically for a certain customer.\textsuperscript{93}

These situations involving consumer electronic products illustrate that as technology continues to progress, marketed information will play an ever-increasing role in the lives of consumers. As more information is sold in contexts that allow greater user interaction with the purchased information, courts will be forced to address harms caused by defective information with increasing frequency. Before approaching this task, courts must address whether the tangible–intangible distinction is truly a desirable method for determining the scope of products liability. The muddled reasoning and conflicting results found in the decisions involving books, aeronautical charts, video games, and computer software demonstrate that the tangible–intangible test cannot sufficiently allocate information-derived liability.\textsuperscript{94} Courts, therefore, should abandon the tangibility concept as it is not conducive to consistent or intellectually coherent results.

\section*{III. Information as a Product: A Better Method}

While the courts applying the tangible–intangible distinction are often correct in identifying the relevant conflicting policy goals at issue—the free market of ideas versus adequate risk spreading—they have adopted the wrong conceptual approach to balance these policy issues. In their attempt to determine whether information falls into the definition of product, these courts have illogically severed the information at issue from the physical media in which such information is presented.\textsuperscript{95} This is contrary not only to the commonsense notion of what constitutes a product.

Consumers purchase both the informational content of a good as well as any incidental physical media necessary for the transmission of the information. For example, a buyer of a book supposedly containing the complete works of Herman Melville but instead containing only blank pages would certainly not be persuaded by the argument that any writing was not part of the product she purchased. Under these circumstances, the value to the consumer rests not in the physical object purchased, but in the words and ideas themselves. Although erroneous information does not necessarily result in physical injury, and although

\textsuperscript{94} See supra Part II.
\textsuperscript{95} See supra Part II.
the definition of product is inherently malleable, the problem of defective information is not best served by twisting a legal definition beyond recognition. Furthermore, there is no compelling justification for ignoring the fact that information is a non-severable aspect of the product even in those situations involving personal injury.

A. Information & Traditional Products Liability Doctrine

Because of their fixation on the threshold question of what constitutes a product, courts addressing the issue of defective information have failed to adequately consider other principles of products liability law. Despite the sweeping language of the Restatement (Second) of Torts regarding strict liability, it is clear that manufacturers are not absolutely liable for any harm caused by their products. Rather, most courts have recognized the concept of defect as the linchpin of products liability. To succeed in a claim, a plaintiff must demonstrate that a specific defective aspect of the defendant's product caused her harm. Defects fall into three categories: (1) manufacturing defects; (2) design defects; and (3) warning defects.

For classical manufacturing defects, proving defect is relatively straightforward—the plaintiff merely needs to show that the product deviated from its intended design at the time it left the defendant's posses-

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96 See Krauss, supra note 31, at 30–39; Cantu, supra note 2, at 637.
97 One exception to this is Aetna Casualty (discussed in Part II.A of this Note) where the court found an aeronautical chart to be a defective product because of the manufacturer's choice of how the data was presented graphically. See Aetna Cas. & Sur. Co. v. Jeppesen & Co., 642 F.2d 339, 342 (9th Cir. 1981).
98 See Restatement (Second) of Torts § 402A cmt. a (1965) ("This Section states a special rule applicable to sellers of products. The rule is one of strict liability, making the seller subject to liability to the user or consumer even though he has exercised all possible care in the preparation and sale of the product.").
100 See Henderson & Twerski, supra note 19, at 33. See also Restatement (Third) of Torts: Products Liability § 1 (1998) (imposing liability only for the sale of defective products); Restatement (Third) of Torts: Products Liability § 2 (1998) (defining the term defect).
101 See, e.g., Greene v. B.F. Goodrich Avionics Sys., Inc., 409 F.3d 784, 795 (6th Cir. 2005) (holding that the district court erred in not entering a judgment notwithstanding the verdict in favor of the defendant where the plaintiff failed to present sufficient evidence showing that an allegedly defective gyroscope was more likely than not caused the helicopter crash at issue); Midwestern V.W. Corp. v. Ringley, 503 S.W.2d 745, 747 (Ky. 1973) (noting that the plaintiff's expert witness failed to explicitly state that the car accident at issue was probably caused by the allegedly defective brake drum).
sion. Liability for manufacturing defects is therefore strict in the sense that the amount of care exercised by the defendant is irrelevant—a defendant is liable not for employing inadequate quality control measures that allowed a defective product to arise, but rather for the act of distributing the defective product itself.

Claims grounded in the concept of defective design are more theoretically challenging. While in the case of manufacturing defects a product can be compared to its intended design, when the design of the product itself is questionable there is no readily available standard by which to judge the product. Instead, courts apply a variety of tests to determine whether a product is defective in design. The most widely accepted test is the risk-utility test. Under this test, the plaintiff bears the burden of demonstrating that a reasonable alternative design exists which would have prevented her injury had the manufacturer adopted that design. If the plaintiff is able to make this prima facie showing, a jury must determine whether the manufacturer's failure to incorporate the reasonable alternative design rendered the product not reasonably safe and therefore defective. In making this determination, the jury looks at numerous factors, including the advantages and disadvantages of the product as designed, the costs associated with incorporating the alternative design, the instructions and warnings accompanying the product,

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103 See id. § 2(a) (imposing liability for manufacturing defect "when the product departs from its intended design even though all possible care was exercised in the preparation and marketing of the product.").
104 See id. at cmt. c.
105 See James A. Henderson, Jr., Judicial Review of Manufacturers' Conscious Design Choices: The Limits of Adjudication, 73 Colum. L. Rev. 1531, 1540 (1973) (highlighting the problem of polycentricity in design litigation, which limits the ability of courts to adjudicate the design decisions of manufacturers because altering one facet of a product's design has numerous implications for the product as a whole).
107 See Restatement (Third) of Torts: Products Liability § 2 cmt. d (1998) ("Under prevailing rules concerning allocation of burden of proof, the plaintiff must prove that such a reasonable alternative was, or reasonably could have been, available at time of sale or distribution."). But see Soule v. General Motors Corp., 882 P.2d 298, 308 (Cal. 1994) (holding that the manufacturer has the burden of proof in showing that the utility of the design outweighs its dangers).
108 See Restatement (Third) of Torts: Products Liability § 2(b) (1998). But see Cronin v. J.B.E. Olson Corp., 501 P.2d 1153, 1155 (Cal. 1972) (holding that a product may be defectively designed even if its design does not render the product "unreasonably dangerous").
any reasonable consumer expectations associated with the product, the aesthetics of the product, and the effect the alternative design would have on overall safety.\textsuperscript{109}

As many commentators have noted,\textsuperscript{110} the risk-utility test for design defect is theoretically similar to the common law concept of negligence.\textsuperscript{111} More importantly, numerous courts have refused to allow juries to consider the design choices of certain products and have instead directed verdicts holding that those products are not unreasonably dangerous as a matter of law.\textsuperscript{112} In cases where courts have granted such directed verdicts, important public policy considerations are at play, including maintaining consumer choice within a market\textsuperscript{113} and avoiding a categorical imposition of liability for certain products.\textsuperscript{114} These considerations override the general principle that a jury determines whether a product’s design is unreasonably dangerous.\textsuperscript{115}

A product is also defective when a manufacturer fails to provide reasonable instructions or warnings regarding the foreseeable risks of harm associated with its product.\textsuperscript{116} Numerous factors may be considered when determining whether a particular warning was inadequate.\textsuperscript{117} As with design defects, failure-to-warn claims are theoretically similar to the concept of negligence.\textsuperscript{118}

Instead of approaching the issue of defective information from the perspective of whether or not such information is a product, courts should instead presume that all forms of commercially sold information are products. Courts should then use the existing concept of duty to limit

\begin{footnotes}
\item[109] See Restatement (Third) of Torts: Products Liability § 2(a), cmt. f (1998) (enumerating the factors that should be considered by the jury in determining design defect).
\item[111] Failure to adopt a reasonable alternative design is analogous to an untaken precaution justifying liability under negligence. See David G. Owen, Design Defects, 73 Mo. L. Rev. 291, 310–315 (2008).
\item[113] See Linegar, 909 F.2d at 1154–55 (holding that a contour-style bulletproof vest was not unreasonably dangerous as a matter of law despite the fact that other vests covering greater portions of the torso were available on the market and were a viable reasonable alternative design because it was questionable whether police officers would use the more protective but also more physically restrictive vests); Scarangella, 717 N.E.2d at 679 (holding that a school bus manufactured without an alarm activating when the bus shifted into reverse was not unreasonably dangerous as a matter of law).
\item[114] See Parish v. ICON Health & Fitness, Inc., 719 N.W.2d 540, 545 (Iowa 2006) (holding that a trampoline cannot be defectively designed simply by virtue of it being dangerous).
\item[115] See supra note 108 and accompanying text.
\item[116] Restatement (Third) of Torts: Products Liability § 2(c) (1998).
\item[117] Id. at cmt. i.
\item[118] Id.
\end{footnotes}
liability to those situations where it would best serve the policy goals of products liability. Commentators who have called for a broader application of products liability to commercial information have differing views as to which particular theory such lawsuits should proceed under. This Note takes the position that regardless of which doctrinal heading is applied to a particular lawsuit based on defective information, the concept of duty remains a powerful tool for limiting the scope of liability to those situations where it is justified by the policies underlying the products liability system.

B. A Duty-Based Approach

The recently adopted Restatement (Third) of Torts: Liability for Physical and Mental Harm provides that:

(a) An actor ordinarily has a duty to exercise reasonable care when the actor's conduct creates a risk of physical harm.

(b) In exceptional cases, when an articulated countervailing principle or policy warrants denying or limiting liability in a particular class of cases, a court may decide that the defendant has no duty or that the ordinary duty of reasonable care requires modification.

These principles have played a significant role in the adjudication of products liability claims. This is because duty issues arise in claims brought under both defective design and failure-to-warn theories. Moreover, in numerous products liability cases, courts have engaged in active pretrial policing of claims, using duty to cut off liability as a matter of law.

The comments to § 7 of the Restatement (Third) of Torts provide a variety of factors a court should consider in determining whether to limit

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119 See supra Part I.
121 See supra Part I.
122 RESTATEMENT (THIRD) OF TORTS: LIABILITY FOR PHYSICAL AND EMOTIONAL HARM § 7 (2010).
125 See notes 112–15 and accompanying text.
liability on the basis of duty. In determining whether a seller of defective information should be insulated from products liability suit on no-duty grounds, courts should also consider several other factors that are especially relevant in this context, including: (1) the First Amendment principles regarding the free flow of ideas; (2) the technical nature of many types of information that can invite reliance; and (3) the degree of user input and delegated consumer responsibility.

As applied to defective information, the concept of duty is an enormously powerful tool for shaping liability because it may be applied to products on a categorical level. No-duty decisions allow courts to make broad policy decisions that limit liability as a matter of law and ensure that providers of certain products are not saddled with an unjustly burdensome duty to investigate the accuracy of the information sold. For example, a publisher of a novel clearly should not have a duty to investigate the accuracy of the information in the book because a novel is primarily the fruit of the author's creativity. Similarly, products liability claims against the producer of a video game should be dismissed on no-duty grounds because of the expressive content of the game and the nature of user interaction with the information contained therein.

These are just a few of the more salient examples of where liability for commercially sold information is not justified. In most cases liability for defective information will run against very strong policy goals such as maintaining the free flow of ideas. By considering the particular type of information at hand and applying the factors considered above, courts will be able to allow suits to proceed where justified by public policy and without having to torture the definition of product. This will result in more transparent opinion writing, thereby allowing a plaintiff to challenge a no-duty determination if the policy basis for that decision is later shown to be flawed.

C. Additional Tools for Shaping the Extent of Liability

Approaching the issue of defective information from a duty-based perspective will not result in runaway liability or quell the free market of ideas, as feared by the courts. There are several principles of tort law beyond the concept of duty that courts may use to adequately shape the

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126 See Restatement (Third) of Torts: Liability for Physical and Emotional Harm § 7 cmt. c-i (2010); see also Aaron D. Twerski, The Cleaver, the Violin, and the Scalpel: Duty and the Restatement (Third) of Torts, 60 Hastings L.J. 1, 6 (2008) (arguing that courts take into account many additional factors when making duty determinations).

127 See Noah, supra note 120, at 1218–22 (discussing the First Amendment implications of liability for erroneously printed materials).

128 See id.

129 See Twerski, supra note 126, at 11.

130 See Winter v. G.P. Putnam's Sons, 938 F.2d 1033, 1037 (9th Cir. 1991).
extent of information-related liability. Courts may apply these principles to appropriately balance the competing policy goals of the products liability system and the free market of ideas. Furthermore, these tools are not radical judicial constructions, but rather ordinary legal concepts currently used to manage products liability litigation in non-information contexts.

First, courts still have the ability to limit liability based on normal principles of proximate cause. Product manufacturers are not liable for all the harm their products cause in a strictly but-for sense. Rather, the general tort principle of proximate cause is a necessary element to any products liability claim.\textsuperscript{131} Proximate cause would be particularly relevant in the context of defective information because words often carry unknown consequences.\textsuperscript{132} As the Winter court noted, "words and ideas have wings we cannot clip and which carry them we know not where."\textsuperscript{133} Thus, the principle of proximate cause can serve as a powerful tool to limit liability precisely because ideas carry unforeseen consequences.

Second, for many types of products, liability can still be limited based on the general distinction between goods and services. This is the method that courts have employed in computer software litigation and could potentially adopt for commercial GPS devices.\textsuperscript{134} Although declaring that information is a service would in some contexts curb the scope of liability, this approach essentially runs into the same line-drawing problems the tangible–intangible distinction poses for determining whether something is a product.\textsuperscript{135} As such, courts should first look to other methods to limit liability before considering this approach.

\textbf{Conclusion}

This Note focused on how courts are addressing the issue of erroneous or defective information in products liability law. Courts confronting this issue have generally chosen to deny liability as a matter of law on the grounds that defective information is not tangible enough to constitute a product.\textsuperscript{136} Fearful of the deleterious effect liability could have on free expression, these courts have refused to allow defective information claims to proceed.\textsuperscript{137} However, some courts have nonetheless recognized that defective information could result in viable products liability claims in the context of aeronautical charts and computer

\textsuperscript{131} \textit{See Restatement (Third) of Torts: Products Liability} § 15 (1998).
\textsuperscript{132} \textit{See James v. Meow Media, Inc.}, 300 F.3d 683, 699–700 (6th Cir. 2002); \textit{Sanders v. Acclaim Entm’t, Inc.}, 188 F. Supp. 2d 1264, 1276 (D. Colo. 2002).
\textsuperscript{133} \textit{Winter}, 938 F.2d at 1035.
\textsuperscript{134} \textit{See supra} Part II.C.
\textsuperscript{135} \textit{See supra} Part II.
\textsuperscript{136} \textit{See id.}
\textsuperscript{137} \textit{See id.}
software—a result that flies in the face of the tangible–intangible distinction.\footnote{See id.}

Although commercially sold information poses significant issues for the products liability system,\footnote{See id.} the dilemma is not insurmountable. The tangibility concept should be abandoned and courts should allow defective information cases to proceed under normal products liability theories. In most cases involving defective information, this will likely result in a finding of no liability as a matter of law.

Products liability is an inherently policy-driven body of law, and courts should trust in their ability to use the concept of duty to appropriately limit the scope of liability in a manner that balances the goals of the products liability system while maintaining the free exchange of ideas. This will result in more transparent decision-making and better law.