ABSTRACT

Contrary to the traditional view, this article argues that mega-brands are neither economic evils nor limited to imparting information about the products they adorn. It also rejects the view that famous marks persuade “snobs” to “irrationally” pay more for the same physical product they could have purchased for less. Rather, it adopts the view that in purchasing a branded good, the consumer is actually purchasing a bundle of three products: a physical product, information about the physical product, and an intangible product, such as fame, prestige, peace of mind, or a pleasant feeling. This article explores the demand for the intangible product and its impact on pricing, welfare, and the strategies of consumers and producers. It concludes that under certain conditions one may witness the anomaly of an increase in both price and output. Further, contrary to conspicuous goods theory, this analysis shows that snobbism may occur in the traditional downward-sloping demand curves and is not limited to goods with conspicuous properties.

A direct implication of this analysis is that mega-brands neither confer a monopoly nor foster price discrimination. On the contrary, they enhance competition in both the physical and intangible spheres. Further, the analysis provides a rational basis for anti-dilution law. Anti-dilution law—widely considered to protect producers and injure consumers—actually inures to the benefit of both groups. Finally, this analysis shows that even snobs are rational, and that there are sound economic justifications for the law’s unique protection of famous marks.

* John M. Olin Scholar in Law and Economics, The University of Chicago School of Law; Doctoral Candidate (J.S.D.), University of Chicago; LL.M., University of Chicago; J.D., Bar-Ilan University; B.A. (Economics), Bar-Ilan University. I thank William Landes, Lisa Bernstein, Bernard Harcourt, Ariel Porat, Gil Sadka, Neta Gottlieb, Abby Moncrieff, the participants of the Legal Scholarship Workshop at the University of Chicago and the Intellectual Property Workshop at the Hebrew University and the John M. Olin Program in Law and Economics at the University of Chicago. All mistakes are my own.
INTRODUCTION

“The primary value of the modern trademark lies in the conditioned reflex developed in the buyer . . . . To the extent that advertising of this type succeeds, . . . economically irrational elements are introduced into consumer choices; and the trademark owner is insulated from the normal pressures of price and quality competition. In consequence the competitive system fails to perform its function of allocating available resources efficiently. Moreover, the economically irrelevant appeal of highly publicized trademarks is thought to constitute a barrier to the entry of new competition into the market . . . . In some markets this barrier to entry may be insuperable.” — Judge Browning in Smith v. Chanel.¹

“[P]eople like to get what they think they are getting, and courts have steadfastly refused in this class of cases to demand justification for their preferences. Shoddy and petty motives may control those preferences; but if the buyers wish to be snobs, the law will protect them in their snobbery.” — Judge Hand in Benton Announcements.²

“[T]he public is entitled to get what it chooses, though the choice may be dictated by caprice or by fashion or perhaps by ignorance.” — Justice Cardozo in Algoma Lumber.³

This article seeks to answer two basic questions: First, why are some consumers (often referred to as “snobs”)⁴ willing to pay more for a product simply because it bears a famous trademark? And second, should the law protect snobs’ preferences? The law’s answer to the first question is that snobs are irrational because celebrated trademarks⁵ and persuasive advertising⁶ play upon their susceptibilities.⁷ Famous trademarks have also been accused of other economic evils: enhancing product differentiation, raising barriers of entry, and wasting resources that could have been used to produce “real goods.”⁸ At the same time, however, the law protects these irrational preferences and thus enables branded products to command higher prices than identical non-branded goods.⁹ The law does so by securing con-

¹ Smith v. Chanel, Inc., 402 F.2d 562, 567 (9th Cir. 1968) (footnotes and citations omitted).
² Benton Announcements, Inc. v. FTC, 130 F.2d 254, 255 (2d Cir. 1942).
⁴ See, e.g., E. Wine Corp. v. Winslow-Warren, Ltd., 137 F.2d 955, 958 (2d Cir. 1943); Benton Announcements, 130 F.2d at 255. In using the term “snob,” I do not take any moral stand but merely describe a phenomenon.
⁵ I use the term “trademark” here in a broad sense to include all trade symbols.
⁶ By “persuasive advertising” I mean advertising that does not directly provide information about the physical product it adorns. See also infra notes 19, 24-32 and accompanying text.
⁷ See Algoma Lumber, 291 U.S. at 78; Smith v. Chanel, Inc., 402 F.2d 562, 567 (9th Cir. 1968); Benton Announcements, 130 F.2d at 255; infra notes 24, 27-29 and accompanying text.
⁸ See infra notes 19-21 and accompanying text.
⁹ Protecting famous marks is, in fact, protecting snobism. The law protects both, as is evident from the excerpts above. Algoma Lumber, 291 U.S. at 78; Chanel, 402 F.2d at 567; Benton Announcements, 130 F.2d at 255. See also E. Wine, 137 F.2d at 958 (“There appears to be a related judicial policy of protecting snobbism . . . .”)

consumers’ “misperception” that physically identical products are, in fact, different. Trademark anti-dilution law, for example, protects famous marks (but not “regular” ones) against erosion of their image.\(^\text{10}\) It thus maintains the very magnetism that distinguishes branded from generic products. Trade-name law achieves the same end by prohibiting sellers from using misdescriptive terms to inform consumers that physically identical, but differently branded, products are in fact the same.\(^\text{11}\) This approach—the law’s protection of consumers’ “irrationality” through its protection of famous trademarks—is perplexing. Why should the law protect snobbery if it leads to anticompetitive outcomes? Should not the law be aimed at breaking down what it regards to be irrational preferences of the buying public? The puzzle is even greater because “protecting” capricious decisions, on its face, injures the very consuming public whose welfare the law seeks to promote.\(^\text{12}\)

This article offers an economic rationale for the law’s protection of famous marks. It begins by challenging the assumption that consumers’ willingness to pay more for branded products is irrational. It argues that branding (a term I use for both famous marks and the persuasive advertising that promotes them) is an economic good, not a “bad,”\(^\text{13}\) and consumers’ seemingly caprice-driven decisions are, in fact, rational and welfare maximizing. The article is based on the recognition that when purchasing a branded good, the consumer receives three bundled products: a physical product (e.g., a watch, a car, or a pocketbook), information about the physical product (e.g., the “Rolls Royce” mark in connection with the sale of sex products), and the value of the brand itself.\(^\text{10}\) See infra Part III.B. Anti-dilution protects a famous trademark against two types of image-eroding activities: tarnishment and blurring. Tarnishment occurs when a famous mark is portrayed in an unsavory manner, thereby replacing a positive image with a negative one (e.g., using the “Rolls Royce” mark in connection with the sale of sex products). Blurring is a dilution of the mark’s uniqueness. It occurs when a famous mark is used in connection with the sale of numerous products (e.g., using the “Rolls Royce” mark for radio tubes, restaurants, etc.). See Wall v. Rolls-Royce of America, Inc., 4 F.2d 333, 333 (3d Cir. 1925); infra Part III.B.

\(^{11}\) The following example, based on FTC v. Royal Milling Co., 288 U.S. 212 (1933), is illustrative. Assume snobs prefer to purchase high-priced flour from mills rather than low-priced flour from sellers who do not mill it themselves, even though the two types of flour are physically identical. If the law allowed non-millers to use the word “Mill” falsely in their trade-names, consumers would be misled because they would believe that the seller had milled its own flour. But the consumers would be misled to their financial benefit: they would receive the very physical product they intended to purchase at a lower price. At the same time, millers would not be worse off: absent passing off, the millers would still be able to reap the fruits of their investments. In a number of decisions, however, the Supreme Court has prohibited sellers from including such misdescriptive terms in their trade-names. The result is that, on its face, by protecting consumer snobbery, the law harms them.

\(^{12}\) See supra note 11.

\(^{13}\) Gary S. Becker & Kevin M. Murphy, A Simple Theory of Advertising as a Good or Bad, 108 Q. J. ECON. 941, 941 (1993). The authors define a “good” as “something consumers are willing to pay for,” and a “bad” as “something consumers pay to have removed or must be compensated to accept.” Id.
cal product (e.g., its constituent materials, durability, and the mode of its manufacture), and an intangible product, such as fame, prestige, peace of mind, or just a pleasant feeling.

Part I discusses the three most common schools of thought on branding: the “hard-liners,” who believe that consumers are irrational and that branding is a waste; the “soft-liners,” who value branding only to the extent that it provides information about a product’s physical qualities; and the “middle-liners,” who recognize the psychological effects and benefits of branding. Part II discusses the legal protection accorded to famous marks and snobbish preferences. It concludes that courts and jurists have adopted a hard-line premise (famous marks are harmful) but a soft-line conclusion (famous marks, and thus snobbism, should be protected).

Part III undertakes to resolve the inconsistency in the law by adopting the middle-liner’s view that a branded product is, in actuality, a bundle of three products, arguing that the intangible product of that bundle has social value. It then explores the normative and positive implications of this explanation on the laws of trademark anti-dilution and price discrimination. Anti-dilution has been described as “wholly resistent [sic] to analysis”\(^\text{14}\) and injurious to consumers.\(^\text{15}\) Conversely, this article argues that anti-dilution inures to the benefit of both consumers and producers. For the producer, it is forward looking, protecting the ability of a famous trademark to generate future sales. For the consumer, it is backward looking, protecting her pre-purchase expectations and the value of the intangible product she purchased. Dilution imposes an externality because a third party may cause the consumer an injury if he tarnishes the pleasant aura for which the consumer paid.

Part III also offers a new interpretation of the Robinson-Patman Act in order to square price discrimination law—which is intended to ensure that identical products are sold at the same price—with trademark law, which, by protecting the allure of mega-brands, enables sellers of branded product to charge higher prices than those charged for generic goods. Persuasive branding, however, neither confers a monopoly nor fosters price discrimination. Competition exists both in the physical and intangible spheres. In the intangible sphere, a Cartier watch, a Ferrari car, and a Gucci bag all compete for the attention of the buyer who wishes to purchase status. Be-


\(^{15}\) See, e.g., Ralph S. Brown, *Advertising and the Public Interest: Legal Protection of Trade Symbols*, 57 YALE L.J. 1165, 1169, 1172, 1180-84 (1948). Opponents of anti-dilution argue that it harms competition and that it leads to artificial product differentiation thereby raising consumer prices. See id. In their view, protecting persuasive advertising (as opposed to informative) interferes with the consumer’s free choice and disposes the consumer of his income. See id.
cause physically identical articles may carry different intangible freight, the law should allow a producer to charge different prices for physically identical products bearing different marks without being suspected of engaging in a discriminatory activity or being subject to an antitrust inquiry.

Part IV constructs a formal model which breaks down the demand for a branded product into the three components. Unlike the prevailing literature on advertising, this model does not assume that branding “give[s] favorable notice” to other goods.\textsuperscript{16} It also deviates from signaling models which argue that the role of branding is limited to imparting information about the physical product that advertisements endorse.\textsuperscript{17} Instead it assumes that branding creates a new intangible good that must piggyback on the physical one. The model explains why branding occurs in markets with incomplete information as well as in perfectly competitive markets. It differs from the economic literature on conspicuous goods in two important ways. First, it does not limit itself to visible goods and so can explain consumers’ willingness to pay for branded products which are visible to others as well as branded yet inconspicuous goods. Second, the model does not assume that snobs face an upward-sloping demand curve. Rather, the model demonstrates that under certain conditions, one may witness the anomaly of an increase in both price and output, but that such phenomena may occur in the traditional downward sloping demand curves. Unlike previous approaches, this model provides a theoretical framework that takes into account both the informational and persuasive values of branding. Part V offers concluding remarks.

I. THE APPROACHES TO PERSUASIVE BRANDING

Persuasive branding comprises a large segment of the economy. Jurists, psychologists, and economists have tried to explain the purposes served by ever-growing advertising outlays and to measure their impact on consumption, culture, and welfare. Many have reached the conclusions that branding’s sole purpose is to serve producers and that it is nothing more than a drain on the economy.\textsuperscript{18} Why do producers invest so much money on

\textsuperscript{16} Becker & Murphy, supra note 13, at 942, 945. Becker and Murphy argue that advertisements raise the demand for physical goods. Id. This article adopts the view that they create a new intangible product.

\textsuperscript{17} This approach is mainly attributed to Phillip Nelson. See infra note 32 and accompanying text.

\textsuperscript{18} If this spending is a drain, it is an enormous one. In 2003 alone, the top 100 international marketers increased their advertising expenditures by 11.6% to $82.83 billion. Craig Endicott, Top Marketers Spend $83 Billion; P&G, Unilever Are Top Spenders; China Drives Asia/Pacific Gains, ADVERTISING AGE, Nov. 8, 2004, at 30. This increase came following a 7.1% increase in 2002 and a 2.6% decline in 2001. Id. Of these 100 marketers, 25 spent more than $1 billion on advertising in 2003.
advertising containing very little or no direct information? Is branding desirable? This Part addresses these questions.

A. The “Hard-Liners:” Branding Is a “Bad”

Some economists take a hard-line position against branding, calling for its eradication. They believe that it is merely a wasteful attempt to change consumers’ preferences, increase barriers to entry, and promote artificial product differentiation. Brands and brand loyalty are said to lead to the creation of monopolies and thus enable manufacturers to command supra-competitive prices and insulate themselves from the chills and fevers of competition. Some maintain that persuasive advertising is even im-

---

19 ROBERT H. FRANK, LUXURY FEVER 44 (1999) (“[L]uxury goods . . . . cost real resources to produce . . . . that we could have put to other uses.”); Robert Pitofsky, Changing Focus in the Regulation of Advertising, in ADVERTISING AND SOCIETY 125, 126 (Yale Brozen ed., 1974) (“The case for direct regulation [of advertising] at bottom depends on the ability to draw a line between ‘informative’ advertising . . . . and wholly ‘persuasive’ . . . . The argument that such [persuasive] efforts are socially . . . wasteful is particularly compelling . . . .”); HENRY C. SIMONS, ECONOMIC POLICY FOR A FREE SOCIETY 71-72 (1948); see JOHN KENNETH GALBRAITH, THE AFFLUENT SOCIETY 125-30 (40th anniversary ed. 1998) [hereinafter GALBRAITH, AFFLUENT SOCIETY]; JOHN KENNETH GALBRAITH, THE NEW INDUSTRIAL STATE xxii, 303-05 (4th ed. 1985).

20 See JOE S. BAIN, BARRIERS TO NEW COMPETITION 115 (1956); GALBRAITH, AFFLUENT SOCIETY, supra note 19, at 125-30.

21 JOE S. BAIN, INDUSTRIAL ORGANIZATION 227 (2d ed. 1968); Hurwitz & Caves, supra note 18, at 304 n.14.

22 See Becker & Murphy, supra note 13, at 955.

23 EDWARD HASTINGS CHAMBERLAIN, THE THEORY OF MONOPOLISTIC COMPETITION 126-27, 174 (8th ed. 1962); THORSTEIN WEBELEN, THE THEORY OF BUSINESS ENTERPRISE 55 (Harvard Univ. Press 1965) (1904) (“The end sought by the systematic advertising of the larger business concerns is such a monopoly of custom and prestige. This form of monopoly is sometimes of great value, and is frequently sold under the name of good-will, trademarks, brands etc. . . . The great end of consistent advertising is to establish such differential monopolies resting on popular conviction.”); Phillip Nelson, The Economic Consequences of Advertising, 48 J. BUS. L. 213, 291 (1975) (citing William S. Comanor & Thomas A. Wilson, Advertising Market Structure and Performance, 49 REV. ECON. & STAT. 423, 423 (1967)); see GALBRAITH, AFFLUENT SOCIETY, supra note 19, at 127 n.4; Hurwitz & Caves, supra note 18, at 299-300.
moral and that it enhances another social ill, materialism. Most notably, however, proponents of this school of thought consider the consumer to be irrational and gullible. They also make a clear distinction between “real,” or “physical,” goods—the value of which they recognize—and illusionary or “prestige” goods (actually “bads”), which they consider wasteful. The following excerpt is typical for this school of thought:

Buyer preferences for certain products are developed or shaped by the persuasive sales-promotion activities of sellers, and particularly advertising . . . . Advertising, and other sales promotion may of course be primarily “informational” in its impact . . . . But in fact the bulk of advertising is instead primarily “persuasive.” It is aimed at creating product preferences thorough generally phrased praises of the attributes of various outputs . . . . Thus an important category of product differentiation is built primarily on a non-rational or emotional basis, through the efforts of the “ad-man.” . . . . The possibility of developing significant product differentiation through advertising . . . is greatly enhanced for so-called “gift goods” or “prestige goods” . . . . and those that though not given away are similarly bought with the motive of gaining the admiration or gratitude of others . . . .

Luxury goods and real goods, they argue, satisfy different needs. Most important are the “real” needs. These include food for the hungry, clothing for the cold, and houses for the homeless. As a society becomes more affluent, more “desires” are created. These lower-order needs are the fruits of prodigal outlays and are psychologically, not physically, grounded. This approach has found a strong foothold among legal scholars. Professor Brown, for example, analogizes branding to a “black art”

24 BAIN, supra note 21, at 227 (emphasis added); see also CHAMBERLAIN, supra note 23, at 119-20 (“[S]elling methods which play upon the buyer’s susceptibilities, which use against him laws of psychology . . . . against which he cannot defend himself, which frighten or flatter or disarm him—all of these have nothing to do with his knowledge. They are not informative; they are manipulative.”). For Chamberlain, “the art of the advertiser is akin to that of the hypnotist” who wishes to gain control of the buyer’s consciousness. Id. at 133; see also Marshall McLuhan, Ads: Keeping Upset with the Joneses, in ADVERTISING’S ROLE IN SOCIETY 5, 6 (John S. Wright & John E. Metes eds., 1974) (“[A]dvertising . . . is greatly enhanced for so-called “gift goods” or “prestige goods” . . . . and those that though not given away are similarly bought with the motive of gaining the admiration or gratitude of others . . . .”


26 See GALBRAITH, AFFLUENT SOCIETY, supra note 19, at 115.

27 See GALBRAITH, AFFLUENT SOCIETY, supra note 19, at 127-29. See also Harry G. Johnson, Apologia for Ad Men, in ADVERTISING’S ROLE IN SOCIETY, supra note 24, at 242-43. According to Galbraith, even “the most retarded student in the nation’s most primitive school of business administration” would recognize that “wants can be synthesized by advertising, catalyzed by salesmanship, and shaped by the discreet manipulations of the persuaders.”

whose goal is to sell illusions to the irrational consumer. 29 He concludes that “the resources, measured in billions, going into persuasive advertising, result only in a curtailed output of real goods. ” 30 In his view, the law should protect only informative advertising and should reject anti-dilution laws, which he deems “the clearest, most candid, and most far-reaching claim on behalf of persuasive values.” 31

B. The “Soft-Liners:” Branding Is Information

Another group of economic theorists views branding as a good because it conveys useful information about a product’s attributes and quality. 32 Soft-liners explain that if a consumer has had a bad experience with a product...

---


29 Brown, supra note 15, at 1165-66 (“[T]he demands of modern advertising, a black art whose practitioners are part of the larger army which employs threats, cajolery, emotions, personality, persistence and facts in what is termed aggressive selling.”). Professor Brown notes that advertising has two main purposes: to inform and to persuade. Id. at 1183. To the extent that advertising provides consumers with information, it has a social utility. Thus, “[i]n a pure economy, advertising outlays (except for information to make the market more nearly perfect) would only add to the costs, and decrease the profit, of any firm.” Id. at 1169-71.

30 Id. at 1179.

31 Id. at 1191. Of this critical view is also Klieger, who accuses dilution of protecting persuasive values and artificial product differentiation that are “built primarily on a non-rational or emotional basis . . . .” Klieger, supra note 28, at 858 (citations omitted). See also 1A RUDOLF CALLMANN, CALLMANN ON UNFAIR COMPETITION, TRADEMARKS AND MONOPOLIES § 7:29, at 7-97 to -98 (Louis Altman ed., 4th ed., West Group 2003) (“Although the independent value of the well-known trademark, its function as a means of identifying the article . . . . the economic value because of its irrational appeal were duly noted by the Supreme Court, it is now clear that a famous trademark cannot be relied upon to justify a price differential, if the products are not physically different.” (footnotes omitted)). For a more recent formulation of Brown’s philosophy, see Litman, supra note 28, at 1718 (“Ralph [Brown]’s analysis seems even more compelling, now that we have had a chance to see the world of advertising grow in the intervening years.”) Strong trademark protection “would yield no benefits to consumers and would discredit the public interest by shielding firms from healthy competition.”).

32 See Phillip Nelson, Information and Consumer Behavior, 78 J. POL. ECON. 311 (1970) [hereinafter Consumer Behavior]; Phillip Nelson, Advertising as Information, 82 J. POL. ECON. 729 (1974); Nelson, supra note 23, at 213 (“I find the hypothesis that advertising changes tastes intellectually unsatisfactory. We economists have no theory of taste changes, so this approach leads to no behavioral predictions. The intuitions of one group of economists are matched against the intuitions of other economists with no clear resolution.”). See also George J. Stigler & Gary S. Becker, De Gustibus Non Est
product, then an advertisement or a trademark will revive the bad experience in her memory and consequently lead to a decrease in consumption.\textsuperscript{33} The result is that only sellers with good products will find it profitable to brand them. Under this view, branding serves as a screening mechanism that signals to consumers which products are good and which are faulty. The soft-liners, however, do not look beyond the physical product. They do not believe that the branding serves a psychological role. To them, branding has no value besides its ability to convey that the physical product it promotes is a winner. Were perfect information otherwise abundant and costless, even they would agree that branding is wasteful.\textsuperscript{34}

C. The “Middle-Liners:” A Rational Choice Approach

Occupying the ground between the hard-liners, who deplore the effects of persuasive branding, and the soft-liners, who view branding as a means to communicate information about physical products, are the middle-liners, who take an intermediate approach. Middle-liners recognize the informational value of branding but also pay attention to its psychological effects.\textsuperscript{35} They argue that advertising adds new value to an existing physical product.\textsuperscript{36} Consumers, therefore, are rational to consider branding in making their purchasing decisions. As Demsetz explained:

Pork to a religious Moslem hardly offers the same value that it does to a Christian. Nothing is intrinsic about the values of the commodities and services. Their worth depends on how we perceive them ... . Underlying the idea that commodities have intrinsic value is the be-

\textit{Disputandum} 67 \textit{AM. ECON. REV.} 76 (1977). \textit{But see Ronald H. Coase, Advertising and Free Speech, 6 J. LEGAL STUD. 1, 10 (1977). After quoting Nelson on changing tastes, Professor Coase noted that he “would have thought that the belief that advertising had some effect on tastes ... . was shared by everyone who is willing to agree that tastes can change. No doubt Professor Nelson is correct when he says that we do not have a theory of tastes. But ignorance about a subject seems an inadequate reason for not studying it.” Id. (emphasis added). Only three years after Nelson’s article, Dixit and Norman developed a controversial framework to analyze changes in taste due to persuasive advertising. Avinash Dixit & Victor Norman, \textit{Advertising and Welfare}, 9 \textit{BELL J. ECON.} 1 (1978).

\textsuperscript{33} This analysis applies to products characterized by repeat purchasers and experience qualities (i.e., qualities that consumers learn by experience, such as the taste of canned tuna).

\textsuperscript{34} See, e.g., Lillian R. BeVier, \textit{Competitor Suits for False Advertising Under Section 43(a) of the Lanham Act: A Puzzle in the Law of Deception}, 78 \textit{VA. L. REV.} 1, 5 (1992) (“Under conditions of perfect competition, there is no advertising because consumers are assumed to be endowed at the outset with perfect information and thus have no need for it.”); Brown, \textit{supra} note 15, at 1170.

\textsuperscript{35} See, e.g., Theodore Levitt, \textit{Advertising and its Adversaries}, in \textit{ADVERTISING’S ROLE IN SOCIETY}, \textit{supra} note 24, at 248 (noting that “[c]ivilization is a man’s attempt to transcend his ancient animality; and this includes both art and advertising.”).

lie that we are motivated by basic, stable, and simple wants. If man ever was so motivated, that time has long since passed.\textsuperscript{37}

To sum, many theorists have tried to provide an explanation of the value or lack of value associated with branding and persuasive advertising; yet none of the theories developed to date provides an explanation that systematizes the judicial decisions. The remainder of this article attempts to do just that. Building on the views of the middle-liners, it seeks to demonstrate that persuasive branding indeed adds value to the physical product. As shown in the next part, in a modern society even the most basic goods such as flour, gas, lumber, and meat have more than the tangible qualities that the eyes meet or the hands feel.

II. TRADEMARK & TRADE-NAME LAWS: PROTECTING SNOBS

Trademark and trade-name law’s approach to persuasive branding is inconsistent. It suffers from a hard-line—soft-line schizophrenia. It adopts a “hard-line” premise: snobs are irrational and branding exploits their susceptibilities. But instead of fighting what it perceives to be anticompetitive behavior (as the hard-liners do), it adopts a “soft-line” solution, protecting famous marks, and thereby snobbism, thus allowing sellers of branded products to charge higher prices than those for identical non-branded goods.

In a series of cases, the Supreme Court fully embraced the hard-liners’ view that consumers are often irrational in their purchasing decisions. Persuasive branding, wrote Justice Harlan, may “undeniably . . . be used to create irrational brand preferences and to mislead consumers as to the actual differences between products . . . .”\textsuperscript{38} Its object is “to impregnate the atmosphere of the market with the drawing power of a congenial symbol,”

\textsuperscript{37} Id. Demsetz’s theory that commodities are basic building blocks whose value is determined by consumers’ perception was modeled by Stigler and Becker. See Stigler & Becker, supra note 32, at 77. Stigler and Becker propose a new theory of consumers’ choice. Id. Unlike the traditional theory in which consumers maximize their utility function directly from the goods purchased, in their reformulation consumers maximize utility from commodities they produce with goods, their own time, skills, and other inputs such as advertising. \textit{Id}. To illustrate, consider the utility a consumer receives from playing tennis. The game itself is the “commodity” that enters the utility function. The racquet, balls, and their brand names are just inputs. The consumer does not buy them to own them because she derives no utility from the goods themselves. They are used to “manufacture” the game. \textit{See id.}; \textit{see also} Len M. Nichols, Advertising and Economics Welfare, 75 AM. ECON. REV. 213 (1985). Unlike Stigler and Becker, this author perceives trademarks not as inputs but as parts of an intangible end-product that directly enters the consumer utility function.

\textsuperscript{38} FTC v. Procter & Gamble Co., 386 U.S. 568, 603 (1967).
rather than to communicate information as to quality or price.\textsuperscript{39} Trademarks were even accused of possessing Pavlovian capabilities, creating a “conditioned reflex” in buyers’ minds.\textsuperscript{40} It was held that, to the extent that persuasive branding succeeds,

 economically irrational elements are introduced into consumer choices; and the trademark [or trade-name] owner is insulated from the normal pressures of price and quality competition. In consequence the competitive system fails to perform its function of allocating available resources efficiently. . . . Moreover, the economically irrelevant appeal of highly publicized trademarks is thought to constitute a barrier to the entry of new competition into the market . . . . In some markets this barrier to entry may be insuperable.\textsuperscript{41}

The judicial approach suffers from schizophrenia because, rather than fighting what it claims to be artificial product differentiation, misallocation of resources, and social waste, it protects consumers’ capricious decisions and helps to maintain consumers’ perception that branded and non-branded products differ.

As early as 1933, the Supreme Court held that “if consumers or dealers prefer to purchase a given article because it was made by a particular manufacturer . . . they have a right to do so, and this right cannot be satisfied by imposing upon them an exactly similar article, or one equally as good . . . .”\textsuperscript{42} In \textit{Royal Milling Company}, the Federal Trade Commission (“FTC”) enjoined defendants’ use of the words “Mill” or “Milling” in their trade names because such use was misleading for sellers, not grinders, of flour.\textsuperscript{43} On appeal, both the Sixth Circuit and the Supreme Court acknowledged that the consuming public possessed an unfounded belief that flour bought directly from grinders is superior to that sold by the defendants.\textsuperscript{44} Yet the courts differed in their willingness to protect consumers in their “irrational belief.” The court of appeals focused on the product’s physical characteristics.\textsuperscript{45} The two types of flour (those made by grinders and those mixed and sold by the defendants), it said, were of the same quality, were made under the same process with the same machinery, and were therefore

\textsuperscript{40} Smith v. Chanel, Inc., 402 F.2d at 562, 567 (9th Cir. 1968).
\textsuperscript{41} Id.
\textsuperscript{42} FTC v. Royal Milling Co., 288 U.S. 212, 216 (1933).
\textsuperscript{43} Id. at 214.
\textsuperscript{44} Royal Milling Co. v. FTC, 58 F.2d 581, 583 (6th Cir. 1932) (“It is not shown that the petitioners' product is injurious to the consumer, or that it is in any way different from or inferior to the product of their competitors.”); \textit{Royal Milling}, 288 U.S. at 216 (“If consumers or dealers prefer to purchase a given article because it was made by a particular manufacturer or class of manufacturers, they have a right to do so, and this right cannot be satisfied by imposing upon them an exactly similar article, or one equally as good, but having a different origin.”).
\textsuperscript{45} \textit{Royal Milling}, 58 F.2d at 582-83.
identical.\textsuperscript{46} This led the court of appeals to the conclusion that there was no public injury or financial loss, and so it set aside the FTC’s orders.\textsuperscript{47} For the court of appeals, the public had received exactly what it had sought to receive.\textsuperscript{48} The fact that the public wanted flour sold directly by grinders, believing it to be different from the defendants’ flour, was of no consequence. Indeed, on its face, the public seems to be better off without the “Mill” distinction because it would receive the same flour at a cheaper price.

The Supreme Court reversed the Sixth Circuit.\textsuperscript{49} It held that because consumers believed that flour sold by grinders was of superior quality, defendants’ use of the word “Milling” caused consumers to be “deceived into purchasing an article which they do not wish or intend to buy . . . .”\textsuperscript{50} It found deception even though the consumer received the same physical product they intended to buy.\textsuperscript{51} In this, the Supreme Court broadened the law of unfair competition to protect consumers against deceit with regard to a product’s psychological value. It protected consumers’ perceptions, even if emotionally-based, irrational, or unfounded.

Less than a year later, a similar case gave the Supreme Court an opportunity to reaffirm the jurisprudence of \textit{Royal Milling}.\textsuperscript{52} In \textit{Algoma Lumber}, the FTC issued a cease and desist order against lumber suppliers who marketed as “California White Pine” lumber that was biologically “Yellow Pine.”\textsuperscript{53} While aware of \textit{Royal Milling}, the Ninth Circuit nonetheless annulled the order, explaining that the two types of woods were “so nearly equal in utility that buyers [were] not injured, even though misled.”\textsuperscript{54} Again, the Supreme Court reversed, holding that even if the two types of lumber were equivalent, consumers are nevertheless prejudiced “if upon giving an order for one thing, [they are] supplied with something else.”\textsuperscript{55} In such matters, “the public is entitled to get what it chooses, though the choice may be dictated by caprice or by fashion or perhaps by ignorance.”\textsuperscript{56}

\begin{itemize}
  \item \textsuperscript{46} \textit{Id.} at 583.
  \item \textsuperscript{47} \textit{Id.}
  \item \textsuperscript{48} \textit{Id.} (“[T]he record fails wholly to establish any injury to the public or any loss suffered by it, either individually or in the aggregate. It is not shown that the petitioners’ product is injurious to the consumer, or that it is in any way different from or inferior to the product of their competitors.”).
  \item \textsuperscript{49} \textit{Royal Milling}, 288 U.S. at 218.
  \item \textsuperscript{50} \textit{Id.} at 217.
  \item \textsuperscript{51} \textit{Id.} at 216-17.
  \item \textsuperscript{52} FTC v. Algoma Lumber Co., 291 U.S. 67 (1934).
  \item \textsuperscript{53} Algoma Lumber Co. v. FTC, 64 F.2d 618, 620, 623 (9th Cir. 1933).
  \item \textsuperscript{54} See \textit{Algoma Lumber}, 291 U.S. at 74 (summarizing the Ninth Circuit point of view).
  \item \textsuperscript{55} \textit{Id.} at 78.
  \item \textsuperscript{56} The law of trademark and unfair competition recognizes the psychological effect of branding on consumers:
    \begin{itemize}
      \item The protection of trademarks is the law’s recognition of the psychological function of symbols. If it is true that we live by symbols, it is no less true that we purchase goods by them. A
With the law thus clarified, the circuit courts followed *Royal Milling*. In *Benton Announcements, Inc.* the FTC ordered a printer to cease describing its stationary as “engraved.” On appeal, the Second Circuit found that the printer’s printing process was much cheaper than engraving and that only experts could distinguish between engraving and the petitioner’s stationery. Nevertheless, the court held that “people like to get what they think they are getting, and courts have steadfastly refused in this class of cases to demand justification for their preferences. Shoddy and petty motives may control those preferences; but if the buyers wish to be snobs, the law will protect them in their snobbery.”

Similarly, in *Kerran v. FTC*, the Tenth Circuit affirmed the FTC’s order enjoining sellers of recycled oil from marketing the oil without disclosing its source. Despite finding that re-refined oil is absolutely identical to “virgin” oil in chemical structure and quality, the court held that because consumers prefer new to used oil, the sellers’ practice misled consumers. “The public is entitled to know the facts . . . and then make its own choice . . . even though the choice is predicated at least in part upon ill-founded sentiment, belief, or caprice.”

The court did not say why consumers’ “irrational” beliefs should be protected. Nor did it find that consumers would be better off if protected in their snobbery. By its reasoning, the opposite is true. Courts have emphasized that persuasive branding fosters the differentiation of physically identical products by creating an aura that enables producers to command higher prices than they would have been able to command had they faced

---

trademark is a merchandising shortcut which induces a purchaser to select what he wants, or what he has been led to believe he wants. The owner of a mark exploits this human propensity by making every effort to impregnate the atmosphere of the market with the drawing power of a congenial symbol. Whatever the means employed, the aim is the same—to convey through the mark, in the minds of potential customers, the desirability of the commodity upon which it appears. Once this is attained, the trademark owner has something of value. If another poaches upon the commercial magnetism of the symbol he has created, the owner can obtain legal redress.


57 *Benton Announcements, Inc. v. FTC*, 130 F.2d 254, 254 (2d Cir. 1942).

58 *Id.* at 255.

59 *Id.*

60 *Kerran v. FTC*, 265 F.2d 246, 248 (10th Cir. 1959).

61 *Id.*

62 *Id.; see also FTC v. Colgate-Palmolive Co.*, 380 U.S. 374, 389 (1965) (“In each [case] the seller has used a misrepresentation to break down what he regards to be an annoying or irrational habit of the buying public—the preference for particular manufacturers or known brands regardless of a product’s actual qualities, the prejudice against reprocessed goods, and the desire for verification of a product claim. In each case the seller reasons that when the habit is broken the buyer will be satisfied with the performance of the product he receives.”).
the full burden of competition. Consumers are on its face worse off because they pay more for products that they could have purchased for much less. The language of these decisions leads to an inescapable conclusion: If instead of protecting consumers’ “irrational beliefs,” courts would impose on them the same item, consumers would purchase the same physical flour, lumber, engravings, or gas at a lower price.

Judge Frank of the Second Circuit took a different approach to the issue in Eastern Wine Corp. v. Winslow-Warren, Ltd. Judge Frank agreed with the Supreme Court’s view that snobbery should be protected. But unlike the Supreme Court, he explained that the purpose is to protect producers, not consumers. The sole purpose of trade-name law, he stated, is to protect producers against those who wish to free ride on their goodwill. Under this view, although consumers are undoubtedly worse-off due to trade-name law, an analysis comparing the cost to consumers and the benefit to producers mandates that the latter receive protection:

Such statements [that trade name law is aimed to protect consumers] the judges did not verify. . . . They did not stop to ask whether there was any conflict between the objective of (a) aiding consumers and (b) that of preventing loss to the businessman who first used the trade-name. They failed to see that the doctrine of so-called “unfair competition” is really a doctrine of “unfair intrusion on a monopoly.” Had they done so, they would squarely have faced the question of the value to consumers of such a judge-made monopoly. But reiteration of the consumer-benefit argument was bound, sooner or later, to evoke doubts such as this: If

---

63 See, e.g., Algoma Lumber Co. v. FTC, 64 F.2d 618, 623 (9th Cir. 1933); Smith v. Chanel, Inc., 402 F.2d at 562, 567 (9th Cir. 1968) (“The primary value of the modern trademark lies in the ‘conditioned reflex developed in the buyer by imaginative or often purely monotonous selling of the mark itself.’ . . . [E]conomically irrational elements are introduced into consumer choices; and the trademark owner is insulated from the normal pressures of price and quality competition. In consequence, the competitive system fails to perform its function of allocating available resources efficiently.”) (citation omitted).

64 Courts could do this, for example, by allowing sellers to use certain misdescriptive terms in their trade-names (e.g., “Mill” for a seller who is not a grinder) or by compelling certain sellers to license to others the right to use a mark.

65 See Standard Brands, Inc. v. Smidler, 151 F.2d 34, 41 (2d Cir. 1945); E. Wine Corp. v. Winslow-Warren, Ltd., 137 F.2d 955, 958 (2d Cir. 1943).

66 See Standard Brands, 151 F.2d at 41 n.13; E. Wine, 137 F.2d at 958 (“There appears to be a related judicial policy of protecting snobbism.”).

67 See Standard Brands, 151 F.2d at 41; E. Wine, 137 F.2d at 958 (“The protection of such monopolies in names seems, then, to rest on the social interest in protecting primarily, not the consumer, but the businessman who has gained a strategic advantage, through building up of good-will,” against the unfair practices by competitors who profit on that good-will.).

68 Judge Frank noted that while courts have adopted a liberal view that the economic well-being of consumers is the paramount goal of any economic activity, “legal principles do not swell à la Robinson Crusoe or in an anarchic state of nature.” E. Wine, 137 F.2d at 958. The law, he explained, often creates immunities from competition (i.e., monopolies); trade-name law, to Judge Frank, creates monopolies to protect producers, not consumers. Id. at 957-58.
Alert & Co. sells a laundry soap, under the name “Quick Clean,” at 75 cents a cake, and a competitor, Wiseacre, Inc., then begins to sell the identical soap under the same name at 50 cents a cake, Alert & Co. loses customers, and therefore money, if it maintains its price; but the purchasers are misled to their financial benefit. If the sole purpose were to protect consumers from direct financial loss, the second name-user in such a case would have a complete defense if he showed that he sold, at a lower price, precisely the same article (compounded of exactly the same ingredients) as the first user.69

In Judge Frank’s view, trade-name law seeks to protect producers so that they can reap what they have sown. This property-patent rationale, however, contrasts with the long-standing view that the essence of both trademark infringement and unfair competition law is to avoid consumer confusion and that “protection of trademark is merely a facet of consumer protection.”70 Moreover, Judge Frank’s explanation fails to explain the cases that gave birth to the Supreme Court’s policy of “protecting consumers in their irrational beliefs.” If the major rationale is to protect a senior competitor from a junior that free-rides on its name, it fails to explain why the Supreme Court did not allow producers to use names that are in the public domain. “Milling” in Royal Milling, “White Pine” in Algona Lumber and “Engraved” in Benton are all generic names, permanent residents of the public domain. Had the Supreme Court allowed sellers of flour to use “Milling” in their trade names, no competitor would have suffered a diminution in his investment. Rather, their marks would continue to serve their traditional function: identifying the product’s source.71 Consumers, on the other hand, would have enjoyed lower prices and increased welfare.

III. RE-EVALUATING THE ROLE OF PERSUASIVE BRANDING

This Part offers a new economic rationale for protecting snobs. It challenges the institutions’ approach conclusion that consumers are irrational and argues that snobbery is a desirable, welfare-enhancing phenomenon that inures to the benefit of both consumers and producers. It does so by offering a more complex view of the role of trademarks.

69 Standard Brands, 151 F.2d at 40-41 (emphasis added).
70 1 J. THOMAS MCCARTHY, MCCARTHY ON TRADEMARKS AND UNFAIR COMPETITION § 2:33 at 2-58 (4th ed. 2002); see also Idaho Potato Comm’n v. M&M Produce Farm & Sales, 335 F.3d 130, 136 (2d Cir. 2003).
71 “Royal Mill,” for example, denotes a specific mill.
A. Looking Beyond the Tangible Product

Prior formulations of the economic role of trademarks assumed that their role is limited to conveying information about the physical product to which they are affixed, thereby reducing consumers’ search costs. Trademarks serve this role by signifying a specific source of manufacture (or sale). Because they denote a constant source, a consumer who wishes to purchase a product she bought in the past does not need to conduct a costly search; she need not investigate the substitutes available in the marketplace, remember the product’s materials, composition, etc. The mark or the trade-name tells her: “I am the one you want.” The mark also provides her with the assurance that the product’s physical attributes are the same as when she last purchased the product.

But viewing trademarks as only a means of communicating information about the product to which they are attached is naïve. Trademarks may, because of a mark’s popularity, be an important attribute of the product itself, just like a color, taste, smell, or design. A trademark may even become the product itself. To illustrate, assume that the insignia used by Mercedes-Benz to identify its cars has become so popular that consumers are willing to don the Mercedes emblem as earrings, key-holders, etc. Such use is a non-trademark use. The mark has become a good of its own. In its new incarnation, the mark is emancipated from the physical product to which it previously had been attached. This new type of product (e.g., earrings) may be manufactured by different tradesmen, each of which may use a trademark to identify itself as a source.

Trademark law is not indifferent to the possibility that a mark may gain such intrinsic value that its “trademark function” may be shaded or even altogether eliminated. The law holds that where a mark is divested of its “trademark value,” it is “functional” (or “aesthetically functional”) and denies it protection. In the case of International Order of Job’s Daughters v. Lindeburg, for example, the defendant sold jewelry and related items bearing the insignias of the Job’s Daughters, which were protected as “col-


73 Of course, there may exist a complementary relationship between the new product (the emancipated mark) and the original goods to which that mark was (and may still be) affixed. For example, if Mercedes-Benz became associated with low quality cars, that would affect the demand for Mercedes-logo earrings. In this case, the earrings and Mercedes may be analyzed as complementary goods.
lective marks.” Nevertheless, the court held that the defendant’s use of the emblems was not actionable because they were functionally aesthetic components of the jewelry. The insignias were copied and sold “on the basis of their intrinsic value, not as a designation of origin or sponsorship.”

Between the two extreme cases—those in which a trademark has a purely informational role (signifying a source of manufacture or sale) and those in which it becomes reincarnated as a product in its own right—lie cases of a third type. In these cases, a trademark retains its source-identifying function but is also an independent good. It increases consumer welfare by decreasing consumers’ informational costs and also provides them with additional utility independent of the parent product.

At least one court, however, was not willing to extend protection in this kind of case. Pagliero v. Wallace China introduced a demand-based analysis, focusing on whether the mark enhances demand for the physical product. If so, the mark is “functional” and is not protected. But if the mark’s impact is limited to imparting information about the goods to which it is affixed—that is, “adopted for purposes of identification. . . and hence, unrelated to basic consumer demands in connection with the product”—it is eligible for protection. The test is similar to Professor Brown’s proposal to disaggregate the informational “threads” of advertising from the persuasive ones.

The Pagliero court’s demand test is inappropriate. A mark, while keeping its “trademark function” as an identifier, may nevertheless legitimately enhance consumer demand. Indeed, an individual might buy a

---

74 Int’l Order of Job’s Daughters v. Lindeburg, 633 F.2d 912, 914 (9th Cir. 1980). A collective mark is a trademark “used by the members of a cooperative, an association or other collective group or organization . . . and includes marks indicating membership in a union, an association or other organization.” 15 U.S.C. § 1127 (2000).
75 Lindeburg, 633 F.2d at 917.
76 Id. at 918.
77 Pagliero v. Wallace China Co., 198 F.2d 339, 343-44 (9th Cir. 1952). Pagliero’s so-called “aesthetic functionality test,” under which trademark protection is barred from a design whose aesthetic appeal is “an important ingredient in the commercial success of the product,” has been limited (albeit not explicitly rejected) by subsequent decisions. See, e.g., Vuitton Et Fils S.A. v. J. Young Enters., Inc., 644 F.2d 769, 773 (9th Cir. 1981).
78 Pagliero, 198 F.2d at 343.
79 Id.
80 Id. The court’s reliance on a demand-based test is misplaced for two additional reasons. First, even where the sole function of a mark is to impart information, it impacts consumer demand. See infra Part IV. Second, the doctrine of functionality calls for a supply-based analysis because functionality is often equated with an increase of producers’ marginal costs. See, e.g., W. T. Rogers Co. v. Keene, 778 F.2d 334, 339 (7th Cir. 1985) (concluding “a functional feature is one which competitors would have to spend money not to copy but to design around, as they would have to do if they wanted to come up with
product not only because of the product’s physical attributes but also because of the insignia or the trade-name that identifies its manufacturer. This combined purpose of the trademark may explain individuals’ willingness to pay more for goods that bear famous marks or trade-names than for goods of identical or even of higher quality. “Armani,” for example, has an independent value. It informs the public of the owner’s refined taste, status, and income. It conveys an “image” or a “look” that is annexed to the physical garment. Similarly, individuals are willing to pay “exorbitant” prices for cars manufactured by Ferrari or Lamborghini not only because of the cars’ unique physical properties but also because of the status that they confer. A Ferrari, unlike an identical vehicle that lacks the Ferrari mark, is able to function as a car while signaling the owner’s wealth, taste, and hedonism.

Note that I do not use the word “signal” in its usual sense. The signaling function of persuasive advertising is not limited to educating consumers about the properties of the tangible product. Rather, it educates others about the owner’s taste, beliefs, and stature. Moreover, trademarks and persuasive advertising sometimes do not serve any signaling purpose; instead, they are limited to providing psychological pleasure and private satisfaction. Consumers are often willing to pay high prices for inconspicuous goods, such as Calvin Klein underwear or a L’Oréal body lotion, neither of which is usually visible to others. They do so because they derive some private benefit from this inconspicuous consumption. To use the slogan coined by L’Oréal, consumers buy the company’s products “because [they’re] worth it.”  

Similarly, a product can be both a signal of status and a source of satisfaction. Hanging a Picasso in the living room is a signal of status for the socialite, but what value does it have for the loner who enjoys only the fact of owning such a piece if not private emotional catharsis?

Specifically, three inseparable demands reside within a branded product. The first is a demand for the product itself: the physical and functional attributes of a suit, a perfume, a salad dressing. The consumer derives a mundane utility from a suit that protects her from the cold, the scent of perfume, and the taste and nutritional value of salad dressing. The second kind of demand is for intra-brand information about the product’s credence

---

81 See L’Oréal from Wikipedia, http://en.wikipedia.org/wiki/L’Or%C3%A9al (last visited Feb. 5, 2007). L’Oréal’s famous advertising slogan—“Because I’m worth it”—was recently replaced with “Because you’re worth it” and more lately “You’re worth it.” Id.

82 For another example of consumers purchasing name-brand products for personal satisfaction rather than for any quality improvements see infra notes 102-105 and accompanying text.

83 On the distinction between inter-brand and intra-brand activities, see infra note 222.
qualities. Was the suit handmade, and is it cashmere or wool? How many calories are in the salad dressing? Is the product reliable and likely to perform well in the future? As shown in Part IV, the information conveyed by the mark leads to the optimal level of consumption of the physical good. The third demand is for the image or psychological pleasure associated with the mark's fame. The consumer enjoys owning a new product; basking in the intangible aura that surrounds the physical good; and feeling wealthy and affluent, spontaneous, cool, or cosmopolitan. Put differently, the trademark does not act to increase sales only by economizing on consumers' search costs or by minimizing consumers' error costs. Rather, it also influences demand for the product itself and increases sales.

The three demands are regularly commingled. While it is intuitive that consumers seek a bundle containing both the product and pertinent information on that product's credence qualities, it is less obvious why a consumer might be interested in tying her demand for an image or a psychological freight to a physical product. The reason is that social norms and technological constraints often prevent consumption of the intangible asset apart from a physical one. Indeed, one cannot enter the local supermarket and ask for five units of "prestige," "status," or "pleasure." There are very few exceptions to this observation. One is the market for titles of nobility. Unlike feudal times, when titles conferred upon their bearers substantial rights (such as voting rights, rights to land, and tax revenue), titles today are primarily a matter of status. Sellers of titles promise their clients "in-

84 The economic literature distinguishes between three types of attributes: experience qualities can be verified pre-purchase (e.g., the color of a tomato); experience qualities can be verified post-purchase (e.g., the taste of canned tuna); and credence qualities cannot be easily verified even post-purchase (e.g., the effects of vitamins). See Michael R. Darby & Edi Karni, Free Competition and the Optimal Amount of Fraud, 16 J.L. & ECON. 67, 68-69 (1973); Nelson, Consumer Behavior, supra note 32, at 317.

85 For cases dealing with products' intra-brand information, see Jacob Siegel Co. v. FTC, 327 U.S. 608, 609-10 (1946); Elliot Knitwear, Inc. v. FTC, 266 F.2d 787, 789 (2d Cir. 1959).

86 For a case discussing the trademark of a product made using a secret recipe, see Mulhens & Kropff, Inc. v. Fred Muelhens, Inc., 38 F.2d 287, 293 (S.D.N.Y. 1929), rev’d, 43 F.2d 937 (2d Cir. 1930).


88 See Gertrud M. Fremling & Richard A. Posner, Status Signaling and the Law, With Particular Application to Sexual Harassment, 147 U. PA. L. REV. 1069, 1070 (1999) ("'Status' has been a concern primarily of sociologists, anthropologists, and historians rather than of economists; and though there is a growing economic literature on the subject, status is still widely considered a non-economic phenomenon because it cannot be purchased or traded. . . . Although one can invest in activities that will raise one's status, for example by publicly donating to charity, or indeed just by flaunting one's wealth, one cannot buy status directly as one can the usual good or service.") (citation omitted).
stant credibility and personal prestige," that they will be “treated like some sort of Royalty or famous film star.” Many websites sell titles such as Sir, Lord, Baron, Count, Viscount, Marquis and Duke. For the small amount of $325 one may even become a Prince, an Emperor or a Sultan. The envied nobility status can be achieved in as little time as fourteen days, and its holder can change her driver’s license, passport, credit cards and bank accounts to reflect her new status. Seated Titles—that is, titles that are accompanied by the name of a locality, (e.g., “The Lord of Hyde Park”) considered to be far more prestigious—are valued primarily for their signaling function. The owner of a Seated Title actually buys a parcel of land in addition to the title itself. Yet, as the title sellers note, “it is the titles themselves that are of significance here with the land itself being of no great importance per se it being but a token area” (the size of the land is usually no more than one square foot).

Social norms are another reason that a physical product must serve as a platform for intangible psychological freight. Consider, for example, the person who wishes to inform the public of her wealth. If she does so explicitly, she will suffer the stigma of being arrogant and a braggart. Moreover, her signal would not be credible: If one could enjoy the social benefits of wealth, prestige, or refined taste simply by praising oneself, many would do so. Consequently, a pooling equilibrium would occur, and the public would be unable to distinguish the truly wealthy or hip from those who merely claim to be. It would be impossible to distinguish those who tell the truth from those who do not. The wealthy consumer (the snob) can achieve the


By acquiring and using a Title [customers] might well find [themselves] treated very differently by the people with whom [they] come into contact in all aspects of social and commercial interaction. . . . Whether on board an aircraft or aboard ship or indeed when simply staying in a hotel anywhere in the world, with a title in front of your name, [they] may find that [they] receive a better class and quality of service. . . . [A] Title may help to enhance the image and profile of [their] company in a very cost effective way. Many of [their] clients, or indeed, potential clients, will undoubtedly be impressed by a titled company owner or board member.

English Feudal Titles, supra note 89.
92 EnglishTitles.co.uk, Seated Title, http://www.englishtitles.co.uk (last visited Feb. 5, 2007).

93 The physical platform is often necessary for the consumption of the psychological product. Watching a horror movie, visiting an amusement park, or even consuming drugs are a few of the more direct ways to produce an emotional thrill but still cannot be separated from physical consumption.
desired effect, however, by wearing a conspicuous garment that transmits the same message. Burberry’s famous trade dress or a Cartier watch could suffice. Being visible to the public, such products function not only as clothing or timekeepers but they also provide information about their owner. The same message that would be taken as arrogance if conveyed directly becomes style when conveyed indirectly. The signal is credible if only those of wealth can afford to purchase such products.

Even in the case of inconspicuous goods, the psychological freight of which is a pleasant feeling received from an undergarment or invisible cosmetic, the consumer has to buy the branded product. If she buys a physically identical product with an unknown brand, she will not be able to achieve the same level of private satisfaction. The consumer who wishes to reward herself with a new Cartier watch or L’Oreal lotion would not be able to mimic the feeling by buying a knockoff watch (even if no one but her would know the difference) or a generic lotion. She would not enjoy the feeling of owning unique or luxurious goods unless she buys the original product (and pays the fame premium).

Similarly, a work of art may carry the same signaling or pleasuring effect. For this very reason, consumers purchase both replicas and original paintings. Replicas provide décor. Originals provide décor and create the image of high socio-economic status.94 Psychological freight can also explain why the price of a painting attributed to a famous painter plummets dramatically when it is discovered to be a forgery. Those who were willing to pay the high premium for the image of snobbery created by a genuine Picasso would not be willing to pay the same amount for same painting if it were attributed to an unknown painter.95 That consumption of intangible psychic goods is not limited to irrational individuals is demonstrated by the fact that even museums call attention to the monetary value of their collections. They do so either explicitly or by calling attention to a work by the way it is exhibited.96 Grampp notes that one such method is to loop a velvet

---

95 See id. at 38. Grampp reports that when “[t]he Museum of Fine Arts in Dahlem, West Berlin, learned that the portrait of The Man With The Golden Helmet was not by Rembrandt as had been thought” and the Metropolitan in New York reached a similar conclusion with regards to two other paintings said to be by the famous artist (Pilate Washing His Hands and Woman Paring Her Nails), their “money value” decreased. Id. at 23. But see Landes & Posner, supra note 72, at 255-56. The scarcity of the original, as opposed to the widespread availability of copies, cannot fully explain the price differential. After all, copies and originals are often perfect physical substitutes: they are of the same grade and quality (to use the words of the Robinson-Patman Act), save the intangible property associated with the original.
96 Robert Hughes, Harold Rosenberg Memorial Lecture at the University of Chicago: Art and Money (May 13, 1984), available at http://members.shaw.ca/competitivenessofnations/Anne%20Hughe
cord in front of a prized acquisition, as the Metropolitan Museum did in 1961 when it hung Rembrandt’s Aristotle Contemplating a Bust of Homer, which was acquired at a record price of $2.3 million. Another method is to post a guard nearby even when her presence is not necessary for the piece’s protection.

A more intriguing example is that of vintage photos. While the original and a copy made from the same negative are identical in most physical aspects (in fact, a copy made from the same negative may be of better quality as the original suffers from wear and tear), the price of the original can be significantly higher. Professors Landes and Posner report that the “Migrant Mother”—Dorothea Lange’s widely reproduced vintage photograph—was sold at Sotheby’s on October 7, 1998 for $244,500. An exhibition-quality print could have been obtained for $50 from the Library of Congress. Consumers are willing to pay more for what they could purchase for less, not because they are irrational (or for want of information), but because they purchase more than a photograph.

Other possible explanations may account for consumers’ willingness to pay for original artwork. I will focus briefly on two. The first explanation is supply and demand. Because the supply of originals of an artwork is very limited (often only one) whereas the supply for copies is very high, the price for the original should be higher, the argument goes. But this rationale assumes that the market for the original and the market for its copies are different product markets, without explaining why. The contrary assumption—that the original and its copies are perfect substitutes—is more appealing, because the two products are physically identical. The article argues that an original is truly different from a copy because the original carries a psychological freight that a copy does not.

The second alternative explanation is investment: consumers are willing to pay more for the original because they know that they can sell it to others at the same or a higher price in the future. This is flawed for two reasons. First, art is a poor investment because art prices are subject to the volatile and ever-changing fashions and fads. Artwork is also unique and so illiquid. Other markets are more easily employed for investment purposes, offering similar or better rates of return at a much lower risk. The main

\[\text{See } \text{GEO. MASON L. REV. at note 14, supra.} \]

\[\text{Page } 626 \text{ of } \text{GEO. MASON L. REV.} \]

\[\text{Vol. 14:3} \text{ of } \text{GEO. MASON L. REV.} \]

\[\text{Copyright} \text{, Borrowed Images and Appropriation Art: An Economic Approach, 9 GEO. MASON L. REV. 1, 5-6 n.17 (2000).} \]

\[\text{Winning The Art Lottery: The Economic Returns to The Ganz Collection, 66 LOUVAIN ECON. REV. 111, 111-30 (2000). Professor Landes reports that the Ganz collection sold in 1997 for $207 million was purchased (between 1941-1991) for about $2 million in 1997.} \]
flaw, however, lies in the assumption that one can purchase a piece of art as an investment only because others are willing to pay more for it. This statement begs the question as to why others would be willing to do so. The answer is that enough consumers are willing to pay a high premium for the intangible value which piggybacks on the original to sustain such a market.

Over-the-counter generic and branded drugs are another example. Though generics can offer equal therapeutic value and drug quality and are monitored by the Food and Drug Administration (“FDA”), many consumers nevertheless prefer to pay more for branded drugs. Surveys show that generic drugs could save consumers hundred of million of dollars every year. For the hard-liners, this is clear proof of the wasteful nature of branding and evidence of consumers’ irrational behavior. Soft-liners would attack the assumption of therapeutic equivalence, arguing that branded drugs convey the information that the physical product to which the mark is affixed is of better quality and so commands a higher price. But they would admit that if the assumption of therapeutic equivalence holds, such advertising is wasteful. The soft-liner’s explanation also fails to explain the large advertising outlays on pharmaceuticals, which appear to be much higher than necessary to merely convey information to consumers.

Consumers of branded drugs are rational, because they are buying not only a drug or information about the drug, but also a feeling. They purchase Bayer Aspirin for the same reason they purchase L’Oreal lipstick: because “they’re worth it.” They receive their peace of mind not only by taking the pain reliever but also from knowing that it was made by Bayer. Moreover, many times a placebo (a tablet that contains no medication) has medical

dollars. Id. at 111. He concludes that Ganz’s investment in art “beat—often by a wide margin—the returns from common stocks.” Id. at 117. Equivalent investment in stocks would have been yielded between $47 million and $133 million, compared to the $184 million profits from the Ganz’s 1997 sale. Id. at 115.

102 See William O. Bearden & J. Barry Mason, Determinants of Physician and Pharmacist Support of Generic Drugs, 7 J. CONSUMER RES. 121, 121-22 (1980). The authors argue that there may be real differences between generic drugs and their brand name equivalents. Chemical equivalency does not necessarily promise therapeutic equivalency because of factors such as “varying packing density, crystalline form of active ingredients, and biological text of inactive fillers and binders.” Id. at 122. Also, some surveys suggest that the FDA is less efficient at monitoring small firms, which are the ones most likely to produce generic drugs. David W. Fisher, Editorial, Generic Chaos, HOSP. PRACTICE, June 1978, at 13, 18.

103 Bearden & Mason, supra note 102, at 122 (citing a Department of Health, Education, and Welfare report that projects that the use of generic drugs could save consumers in excess of $400 million annually).

104 See, e.g., Hurwitz & Caves, supra note 18, at 302 (noting that in the drug industry, where research and development budgets are relatively large, promotional budgets can be two to four times larger).
effects for purely psychological reasons.\textsuperscript{105} An advertisement that constantly harps that a branded drug will make you stronger, healthier, or more sexually active may well cause the drug to perform better than a physically identical drug bearing a different mark or no mark at all.\textsuperscript{106}

B. \textit{Anti-Dilution}

1. Trademark Infringement and Dilution

Trademark dilution is not only a newcomer to the federal arena,\textsuperscript{107} it is also an exception to the general rule. The mainline of trademark analysis is consumer confusion. Traditional trademark infringement occurs when a producer passes his product as another’s, thereby confusing consumers. The law protects consumers so that they can be confident that in purchasing a product bearing a particular trademark they will get that particular product. The law also protects producers from a diversion of trade on non-meritorious grounds.\textsuperscript{108} Although trademark law is designed to protect both consumers and producers, a private cause of action is only available to the trademark owner (in the case of trademark infringement) and to competitors


\textsuperscript{106} See Wampold, et al. supra note 105, 61 (7) 835, 840 (noting that “there are convincing reasons to believe that specific [medical] treatment effects and placebo effects are additive” and that one explanation is that “if part of the placebo effect is due to expectations, then general knowledge of the effectiveness of treatments of a particular disorder will likely increase patients’ expectations.”) This of course provides pharmaceutical with incentives to harp drugs designed to cure disorders which are amenable to placebo effects. Indeed, such persuasive advertising can be considered as part of the treatment.


\textsuperscript{108} S. REP. NO. 79-1333, at 3 (1946), \textit{as reprinted in 1946 U.S.C.C.A.N.} 1274, 1274 (“[T]he purpose underlying any trade-mark statute is twofold. One is to protect the public so it may be confident that, in purchasing a product bearing a particular trade-mark which it favorably knows, it will get the product which it asks for and wants to get. Secondly, where the owner of a trade-mark has spent energy, time and money in presenting to the public the product, he is protected in his investment from its misappropriation by pirates and cheats.”); \textit{see also} Gen. Baking Co. v. Gorman, 3 F.2d 891, 893 (1st Cir. 1925).
Trademark dilution, on the other hand, has been the subject of constant controversy since its introduction into American jurisprudence in 1927 by Professor Schechter. “Dauntingly elusive,” an “amorphous concept,” and “a theory that no one understands” are just a few of the epithets used to describe it. Generally speaking, dilution appears in two forms: blurring and tarnishment. Blurring is the whittling away of a trademark’s uniqueness because other sellers, not necessarily of identical goods, use or modify a trademark to identify their own goods. Using “Rolls-Royce” to brand radio tubes or “Tiffany” for a restaurant are a few examples. In these cases, there is no concern that the public will be confused. There is no risk of passing off—consumers are not likely to think that Rolls-Royce is marketing radio tubes. Nor is there any threat that this use of the mark would divert trade away from Rolls-Royce. But it would reduce

109 Under Section 32 of the Trademark Act only the “registrant” (that is, the mark owner) can sue for trademark infringement. 15 U.S.C. § 1114. False advertising and the infringement of unregistered marks are actionable under Section 43(a), 15 U.S.C. § 1125 (see e.g., Centaur Communications, Ltd. v. A/S/M Communications, Inc., 830 F.2d 1217 (holding that Section 43(a) is “the only provision in the Lanham Act that protects an unregistered mark”). Despite its broad language, however, allowing “any person who believes that he is or is likely to be damaged by”, the right to sue is reserved only to the mark owner (in the case of trademark infringement) or for competitors (in the case of false advertising) (see McCarthy, MCCARTHY ON TRADEMARKS AND UNFAIR COMPETITION §27:13 at 27-27 (“while the Lanham Act does not explicitly require that the plaintiff be the owner of a protectable mark, there is no other way that the requisite likelihood of confusion, deception or mistake can occur. That is, unless plaintiff is the owner of a valid trademark or service mark, the accused designation will not cause a likelihood of confusion”)); See also Colligan v. Activities Club of New York, Ltd., 442 F.2d 686, 692 (2d Cir. 1971); Made in the USA Found. v. Phillips Foods, Inc., 365 F.3d 278 (4th Cir. 2004).
111 Gen. Baking, 3 F.2d at 893.
115 Moskin, supra note 14, at 125.
116 Hormel Foods Corp. v. Jim Henson Prods., Inc., 73 F.3d 497, 506 (2d Cir. 1996) (stating that “[d]ilution by blurring occurs when . . . ‘prospective customers . . . see the plaintiff's mark used on a plethora of different goods and services.’”) (quoting 3 MCCARTHY, supra note 70, § 24:13(1)(a)).
the power of the mark to identify a unique seller, because the words “Rolls-Royce” would trigger associations of a car and a radio tube.  

The second form of dilution, tarnishment, occurs when the plaintiff’s trademark is linked to products of shoddy quality or is portrayed in an unwholesome or unsavory context likely to evoke unflattering thoughts about the owner’s product, thereby injuring the positive associations that owner has built up about the trademark. Tarnishment claims typically arise in cases in which a mark is depicted in the context of sexual or illegal activity or where the defendant pokes fun at another’s mark. For example, in Chemical Corp. of America v. Anheuser-Busch, the court enjoined a seller of a floor wax containing insecticide from using the slogan “Where there’s life there’s Bugs” because it trod too near the plaintiff’s well-known slogan, “Where there’s life there’s Bud,” and so was tarnishing.  

2. Anti-Dilution Law Protects the Persuasive Value of Famous Trademarks  

Anti-dilution theory protects the very function of branding that has elicited hostile reactions from both economists and jurists: persuasiveness. Professor Brown notes that dilution is “the clearest, most candid, and most far-reaching claim on behalf of persuasive values” and concludes that, as such, it should be divorced from the protection of the law. Similarly, the Augusta National court analogized dilution to “a cancer which, if allowed to spread, will inevitably destroy the [persuasive] advertising value of the

---

118 See also LANDES & POSNER, supra note 72, at 207 (“Suppose elite brand names, such as ‘Tiffany’ and ‘Rolls Royce’ were appropriated only by producers of equally fine products. Nevertheless the distinctiveness of the marks as identifiers of the products sold by the Tiffany and Rolls Royce companies would be reduced. More mental time and effort . . . would be required to associate the name with a particular product. The result would be an increase in consumer search costs. This is the ‘blurring’ effect of which the dilution cases speak.”).


120 See, e.g., Coca-Cola Co. v. Gemini Rising Inc., 346 F. Supp. 1183, 1186, 1193 (E.D.N.Y. 1972) (enjoining the sale of “Enjoy Cocaine” posters that consisted of the soft drink manufacturer’s “Coca-Cola” mark).


123 Brown, supra note 15, at 1191.
mark,” causing the erosion of its “magic.” Another commentator concluded that anti-dilution laws preserve the “nonrational associations the shovel maker had succeeded in building up.” More recently, Professor Welkowitz warns that dilution “can create artificial barriers to entry into the marketplace by fostering brand loyalty at the expense of thoughtful decision making.” Kliger similarly observes that “trademarks serve as the vessels through which all forms of advertising, both informative and persuasive must pass.” The latter, he argues, is “aimed at the consumer’s heart rather than his mind.” Rather than convey to consumers information regarding the “physical elements or attributes,” it seeks to create an intangible aura. He concludes that “[w]here product differentiation results from differences in the products’ tangible characteristics . . . informed consumers rationally pay the premium. But where product differentiation ‘is built primarily on a non-rational or emotional basis, through the efforts of the ad-man,’ consumer willingness to pay the premium proves economically inefficient.” Following Professor Brown, he suggests disaggregating good from bad, informative from persuasive. Because he believes that anti-dilution laws protect the persuasive function of trademarks, he urges that they be abandoned altogether.

3. The Rational Basis for Anti-Dilution’s Protection of Famous Marks

Why did Congress adopt a doctrine that protects only the persuasive function of branding which courts and commentators deem to be anticom-
petitive and detrimental? To date, no clear explanation exists. The prevalent view is that anti-dilution laws are intended to protect only the trademark owner and secure the selling power of a famous trademark: its ability to draw future sales. Other reasons often mentioned as possible justifications are: protection of the trademark owner against encroachment on its newly established property right in gross; protection of the mark’s owner against the misappropriation of his investment in advertising; trespass upon the owner’s property; an “unauthorized taking”; the impediment to the trademark’s owner ability to expand his trade to other lines or fields of enterprise; protection against confusing uses; protection against uses that may render his mark generic; protection against the theft of the image and prestige the trademark owner has created; and protection against cheap copies.

In contrast to this controversy, there exists a universal consensus that the aim of anti-dilution law is to protect the owner of the mark rather than consumers, and that this is a departure from the consumer-protection basis to a “radical business-friendly” regime. In its most recent trademark decision, the Supreme Court noted that “[u]nlike traditional infringement

See Moskin, supra note 14, at 122 (stating that dilution is “a phenomenon that cannot be seen, measured or otherwise perceived or detected” and one that “has proven wholly resistant to analysis”).

Deere & Co. v. MTD Prods., Inc., 41 F.3d 39, 45 (2d Cir. 1994).

Coca-Cola Co. v. Gemini Rising Inc., 346 F. Supp. 1183, 1188 (E.D.N.Y. 1972); Chem. Corp. of Am. v. Anheuser-Busch, Inc., 306 F.2d 433, 437 (5th Cir. 1962); Klieger, supra note 23, at 806; Moskin, supra note 14, at 143.

Stork Rest. v. Sahati, 166 F.2d 348, 356-57 (9th Cir. 1948); Tiffany & Co. v. Tiffany Prods., Inc., 264 N.Y.S. 459, 461 (Sup. Ct. 1932); Welkowitz, supra note 126, at 584 (“The real justification for the use of dilution is more the protection of marks against misappropriation than against ‘whittling away.’”); But see Ty Inc., v. Perrymann, 306 F.3d 509, 512 (7th Cir. 2002) (rejecting the misappropriation rationale).

Moskin, supra note 14, at 132; Welkowitz, supra note 126, at 534.

Moskin, supra note 14, at 131.

Schechter, supra note 112, at 823.

Comment, supra note 125, at 523, 531.

3A CALLMANN, supra note 31, ¶ 22:13, at 22-134 to -138, ¶ 22:14, at 22-237; Moskin, supra note 14, at 124, 128, 149; Welkowitz, supra note 126, at 548; Comment, supra note 125, at 523, 531. But see Ty Inc., 306 F.2d at 514 (rejecting the genericism rationale).


LANDES & POSNER, supra note 72, at 208-09.


Klieger, supra note 28, at 805-06.
law, the prohibitions against trademark dilution . . . are not motivated by an interest in protecting consumers.\footnote{146}

Describing anti-dilution as creating a sort of an exclusive property right that inures only to the benefit of producers, some critics have raised questions as to the constitutionality of the doctrine.\footnote{147} Congress can grant an exclusive intellectual property right only under the Patent-Copyright Clause.\footnote{148} This clause requires that an exclusive property right be given only to original “writings and discoveries” and even then for a “limited time” only.\footnote{149} Because trademarks are neither,\footnote{150} in enacting the Trademark (Lanham) Act, Congress had to rely on the less powerful Commerce Clause.\footnote{151} But as Jacobs notes, Congress cannot escape the limitations of the Patent-Copyright Clause or those limitations on Congress’s authority would be meaningless.\footnote{152} Thus, a right granted under the Commerce Clause cannot be exclusive and permanent. If anti-dilution theory elevates a right in a mark to the level of an exclusive property right, it may be found unconstitutional.

Another issue arising under the dilution doctrine is the “fame” requirement. Under the Federal Trademark Dilution Act and the more recent Trademark Dilution Revision Act, only “famous” marks can enjoy anti-dilution protection.\footnote{153} Many have criticized this requirement, arguing that

\footnotesize
\begin{itemize}
  \item \textit{See, e.g., Brian A. Jacobs, Note, Trademark Dilution on the Constitutional Edge, 104 COLUM. L. REV. 161 (2004).}
  \item \textit{U.S. CONST. art I, § 8, cl. 8.}
  \item The Patent-Copyright Clause provides that “Congress shall have Power . . . to promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries.” \textit{Id.} (emphasis added). The Commerce Clause provides that “Congress shall have Power . . . to regulate Commerce with foreign Nations, and among the Several States, and with the Indian Tribes.” \textit{U.S. CONST. art I, § 8, cl. 3.}
  \item A right in a mark can potentially last forever. \textit{See} 15 U.S.C. § 1058. The Supreme Court has also held that trademarks are not original “writings.” \textit{Trade-Mark Cases}, 100 U.S. 82, 94 (1879).
  \item \textit{Yochai Benkler, Constitutional Bounds of Database Protection: The Role of Judicial Review in the Creation and Definition of Private Rights in Information, 15 BERKELEY TECH. L.J. 535, 540 (2000).}
  \item \textit{Id.} at 538-39 (“Congress cannot use a power other than the Intellectual Property Clause—most importantly, its power to regulate interstate commerce—to enact exclusive rights inconsistent with the substantive constraints imposed by that clause.”)
  \item Section 43(c)(2)(A)(1) of the Trademark Act, as amended by the Trademark Dilution Revision Act of 2006, provides that “a mark is famous if it is widely recognized by the general consuming public of the United States as a designation of source of the goods or services of the mark’s owner. In determining whether a mark possesses the requisite degree of recognition, the court may consider all relevant factors, including the following: (i) The duration, extent, and geographic reach of advertising and publicity of the mark, whether advertised or publicized by the owner or third parties; (ii) The amount, volume, and geographic extent of sales of goods or services offered under the mark; (iii) The extent of actual recognition of the mark [and] (iv) Whether the mark was registered . . . . 15 U.S.C.A. § 1125 (LexisNexis 2006).}
\end{itemize}
stronger marks are better able to withstand diluting effects.\textsuperscript{154} It is the weaker and newer marks, they argue, which are more likely to suffer from imitation of their brands’ name.\textsuperscript{155} They therefore conclude that the theory should be extended to protect unknown trademarks.\textsuperscript{156}

4. A New Rational Basis

An analysis recognizing the value of intangible products reveals that anti-dilution laws inure to the benefit of both producers and consumers. Further, they do not elevate a right in a mark to an exclusive property right in gross, but rather secure the traditional role of the trademark owner as the avenger of the public. This analysis allays the constitutional concerns that have been raised and explains the fame requirement.

As described above, when the consumer purchases a good bearing a famous mark, she receives three products: a physical product (e.g., a Ferrari car, a Cartier watch or a L’Oreal body lotion), information about the physical product, and an intangible product. The physical product is under her full control and is subject to the regular wear and tear of life. A Ferrari engine will wear out, a watch will submit to entropy and stop, and the lotion will age and need to be replaced. But that is the only hazard the consumer bears with respect to the physical product. Because the physical product is in the possession of the consumer, no one can exploit it without her permission.

The intangible product, on the other hand, will not suffer from the diseases that are unique to tangible assets. It can last as long as the physical product to which it is attached. Unlike the physical product, however, it is not under the buyer’s control. The buyer receives the right to use or enjoy the intangible psychological effect attached to the product (conveyed by the famous mark), but the mark can be eroded, or diluted, if, for example, the public learns to associate the mark with an unsavory image. If the public learns to associate “Coca-Cola” with drug consumption,\textsuperscript{157} or “Bud” beers with bugs,\textsuperscript{158} then instead of conveying a hedonistic life-style, a sense of freedom, or just a pleasing association, the intangible product will subject a consumer who purchased these goods to ridicule or disgust. Contamination of the mark destroys the value to the consumer. The product’s physical

\textsuperscript{154} 3A CALLMANN, supra note 31, § 22:14, at 22-229; Klieger, supra note 28, at 846; Moskin, supra note 14, at 142; Welkowitz, supra note 126, at 540 (“If anything, weaker marks are more likely to suffer . . . .”).

\textsuperscript{155} Welkowitz, supra note 126, at 540.

\textsuperscript{156} See, e.g., 3A CALLMANN, supra note 31, § 21.12, at 21-53.


\textsuperscript{158} Chem. Corp. of Am. v. Anheuser-Busch, Inc., 306 F.2d 433 (5th Cir. 1962).
value will remain the same, but such tarnishing diminishes the emotional experience and the image that accompany it. Contamination or, to use the trademark lingo, dilution, divests an article from its psychological freight (or even worse, replaces a positive psychological association with a negative one) and renders that freight worthless. The third party that destroys the aura of the famous mark inflicts an externality on both consumers and the producer. He appropriates the positive image of feeling associated with the mark to his own benefit without internalizing the costs of such appropriation. Using the slogan “Never Leave Home Without It” in connection with the sale of condoms as a spoof of American Express’s “Don’t Leave Home Without It” campaign could damage the image of decency and respect that the credit card company has created. It will also decrease consumers’ utility from showing a prestigious card and may lead to a decrease in consumption. This is not to say that there are no benefits from such an appropriation. For example, using the mark “Rolls-Royce” to sell radio tubes could provide consumers with the information that the radio tubes are of high quality. But the producer of the radio tube has other ways to describe its product without inflicting costs on others. The producer could also invest resources in coining new marks to convey the desired message, if it so wishes, and consequently enrich the language. The psychological freight of a mark, however, is still subject to “wear and tear.” If the producer does not maintain the magnetism of its trademark—by advertising the mark and prosecuting those who infringe it—the mark will gradually lose its psychological effect. This “wear and tear,” however, may take time and can be reasonably expected by the consumer. Also, producers are not keen to jeopardize their marks’ sales appeal, because it would detract from their ability to attract prospective customers.

As concerns consumers’ interests, this analysis is backward looking. It protects consumers’ ex ante expectations from the time of purchase against the diminution of their intangible property from the hazard of a possible externality. For producers, on the other hand, anti-dilution law is forward looking. It protects the mark’s ability to draw prospective customers.


In a non-formal survey it was possible to find promises by producers that they will protect the image of their product. See, e.g., Haz Hotels, Int’l, LLC Brochure, http://www.hazhotels.com/Marquis Brochure.pdf (“We Will Protect our Brand and Maintain its Superiority—Strong brand standards are what defines us from others and will keep bringing our guests back to us.”).

This analysis holds true for both durable and non-durable (or even perishable) products. In the case of durable goods, for example a Ferrari car, anti-dilution law protects the premium the consumer paid for fame and status. The consumer’s expectation is that during the post-purchase period, the car’s reputation will be protected from a third party’s detrimental activity. In the case of non-durable goods,
The analysis offered here sheds some new light on the classification of trademark law in the family of intellectual property rights, whose other members—copyright, patent and trade-secret law—have always received preferable treatment as “real” intellectual property rights.\textsuperscript{162} Trademark can also join this “hall of fame,” so to speak, by protecting the intellectual property of consumers. This analysis argues in favor of the expansion of the dilution doctrine. While courts usually find tarnishment when a positive association is replaced by a negative one, a better formulation of the test would protect against associations which are not consistent with the image created by a mark’s owner. A Ferrari consumer, for example, would not want the mark of her prestigious car affixed to a fast food chain, no matter what the chain’s quality, even if it is the “best” of its kind. Such a use will not only blur the mark’s distinctiveness, but it will also create an association that Ferrari owners would likely oppose.

C. \textit{Price Discrimination}

1. “Like Grade and Quality”

Charging different prices for the same physical goods bearing different marks may be illegal for two reasons. First, it may deceive the public as to the quality of the products involved. Because the public reasonably assumes that products bearing different marks are of different quality, affixing different labels to the same product may mislead consumers to pay more for what they could have purchased for less.\textsuperscript{163} Second, it may also be such as a Coca-Cola drink, the immediate consumption of the product (by definition) will not endure for a long period of time, and so post-purchase protection is not required. Yet the consumer enjoys the psychological effects that accompany this consumption. One survey, for example, found that consumers associate Coca-Cola bottles with feelings such as ultimate enjoyment, uniqueness, and universal unity. See Klieger, supra note 28, at 857-58. If the young or cool image conveyed by the mark is destroyed, the consumer will not be willing to pay more than the product’s marginal cost of production. She will also bear the switching cost associated with adapting to a new product which is able to convey a similar signal—assuming such a product exists. Most likely, however, a substitute product would not be available to convey the same signal (or confer the same psychological effects), in which case the consumer’s surplus would decrease further. In some cases, immediate consumption may even increase the premium for prestige. For example, a lavish vacation signals wealth because only wealthy people would spend so much on such a short-duration product.

\textsuperscript{162} See \textit{e.g.}, LANDES \& POSNER, supra note 72, at 166 (“Trademarks are a distinct form of intellectual property from patents and copyrights. In some respect trademark law is closer to tort law (indeed, from a technical legal standpoint, trademark law is part of the branch of tort law known as ‘unfair competition’) than to property law”).

\textsuperscript{163} \textit{Consol. Books Publishers v. FTC}, 53 F.2d 942, 944 (7th Cir. 1931); \textit{1A CALLMANN, supra note 31}, § 5:11, at 5-72 to -74 (“It is reasonable to assume that the use of different trademarks suggests that
considered a form of price discrimination.\textsuperscript{164} Section 2(a) of the Clayton Act, as amended by the Robinson-Patman Act ("RPA"),\textsuperscript{165} provides that it is unlawful for a seller to either directly or indirectly discriminate in price between different purchasers of commodities of \textit{like grade and quality} where the effect of such discrimination may be substantially to lessen competition or to create a monopoly or to injure competition.\textsuperscript{166}

A threshold inquiry concerning a violation of Section 2(a) is, therefore, whether the physically identical commodities bearing different marks are "of like grade and quality." This very question was discussed in \textit{FTC v. Borden.}\textsuperscript{167} Borden produced and sold evaporated milk under its own nationally advertised brand and under various private brands owned by its retail customers.\textsuperscript{168} Although the private-label milk was chemically identical to the Borden brand, the latter was sold at a substantially higher price.\textsuperscript{169} The FTC found the milk sold under the Borden and the private labels to be of like grade and quality and the price differential discriminatory and so issued a cease-and-desist order.\textsuperscript{170} The Fifth Circuit set aside the Commission's order, holding that the private label milk was not of the same grade and quality as the milk sold under the Borden brand because, in determin-

\begin{footnotesize}
\textsuperscript{164} 1 CALLMANN, supra note 31, § 4:54, at 4-587. \\
\textsuperscript{165} 15 U.S.C.S. § 13(a) (LexisNexis 2006). \\
\textsuperscript{166} \textit{Id.} Under Section 2(a) the plaintiff must show: (1) a cognizable difference in price; (2) between two buyers purchasing contemporaneously from the same seller; (3) of commodities; (4) of like grade and quality; (5) that may injure competition. Dyno Nobel, Inc. v. Amotech Corp. 63 F. Supp. 2d. 140, 147 (D.P.R. 1999). The law allows the following defenses to price discrimination claims: (a) to "meet competition"; (b) if there is a "cost justification" (the lower price resulted from a "due allowance for differences in the cost of manufacture, sale, or delivery resulting from differing methods or quantities"); (c) if the price difference results from a "response to changing conditions affecting the market for or marketability of the goods" (e.g., perishable goods). 15 U.S.C.S. § 13(a) (LexisNexis 2006). Some courts also seem to allow the "functional availability" defense: the seller offered the same commodity at different prices, but the lower price was available to all buyers. See, e.g., FLM Collision Parts, Inc. v. Ford Motor Co., 543 F.2d 1019 (2d Cir. 1976), \textit{cert. denied}, 429 U.S. 1097 (1977). Callmann seems to reject the availability defense in the trademark context, stating that, "the public may also be deceived when a manufacturer chooses a form of dual distribution, selling the same product under one trademark at a higher price, and under a different trademark or without trademark at a lesser price. . . . That the consumer may not know of the cheaper alternative makes no difference; because, even if he should learn about it, his confidence in the trademarked product will deceive him into the belief that it is of better quality." 1A CALLMANN, supra note 31, § 5:11, at 5-74. \\
\textsuperscript{168} \textit{Id.} at 638. \\
\textsuperscript{169} \textit{Id.} \\
\textsuperscript{170} \textit{Id.} at 638-39.
\end{footnotesize}
ing whether products are of like grade and quality, consideration should be given to all commercially significant distinctions “whether they be physical or promotional.” If customers are willing to pay more for the “Borden” name, the court reasoned, that product is of unlike grade. In reversing this decision, the Supreme Court adopted the FTC’s view that physical comparison alone determines whether products are of like grade and quality. The Court explained that because “like grade and quality” is a threshold requirement essential to RPA applicability, producers must not be able to differentiate their products merely by affixing different labels, thereby immunizing themselves from Section 2 scrutiny. The Court noted, however, that “tangible consumer preferences” as between branded and unbranded commodities can receive due legal recognition in the more flexible “injury to competition” and “cost justification” provisions. It therefore remanded the case so that it could be ascertained whether the price discrimination resulted in a competitive harm.

Borden is inconsistent with the Supreme Court’s longstanding policy that “the public is entitled to get what it chooses, though the choice may be

171 Id. at 639; Borden Co. v. FTC, 339 F.2d 133 (5th Cir. 1964).
172 The Fifth Circuit was clear that mere affixation of different labels to physically identical products would not suffice. Borden, 339 F.2d at 138. Rather, a showing of a “demonstrable consumer preference” for one brand over the other would be required to conclude that the two products are of different grade. Id. at 137.
173 See also Texaco, Inc. v. Hasbrouck, 496 U.S. 543, 556 (1990); DeLong Equip. Co. v. Washington Mills Abrasive Co., 887 F.2d 1499, 1517 (11th Cir. 1989) (“If products are physically identical, despite differences in labeling or branding, then they are ‘of like grade and quality’ for the purpose of stating a prima facie Robinson-Patman Act case, even though consumers may prefer a higher priced ‘premium product.’”); 14 PHILLIP AREEDA & HERBERT HOVENKAMP, ANTITRUST LAW: AN ANALYSIS OF ANTITRUST PRINCIPLES AND THEIR APPLICATION ¶ 2315 (2d ed. 1998 & Supp. 2005); 1A CALLMANN, supra note 31, § 7:29, at 7-96 to -98.
174 Borden, 383 U.S. at 643-44 (“We doubt that Congress intended to foreclose these inquiries in situations where a single seller markets the identical product under several different brands, whether his own, his customers’ or both. Such transactions are too laden with potential discrimination and adverse competitive effect to be excluded from the reach of § 2(a) by permitting a difference in grade to be established by the label alone or by the label and its consumer appeal.”).
175 Id. at 646.
176 Id. at 647. On remand, the Fifth Circuit found that, “by increased advertising and promotional efforts over the years, Borden has created a decided consumer preference for milk bearing a Borden label.” Borden, 381 F.2d at 180. It found no evidence that “Borden’s price differential exceeds the recognized consumer appeal of the Borden label nor . . . that the prices [were] unreasonably high for Borden brand milk on the one hand, or unrealistically low for the private label milk on the other.” Id. at 181; see also In re Int’l Tel. & Tel. Corp., 104 F.T.C. 280 (1984) (finding that the a price differential ranging from 25 percent to 38 percent between private-label products and a national brand did cause an injury to consumers because it could be explained by consumer preferences and the substantially greater costs associated with promoting the national brand).
dictated by caprice or by fashion or perhaps by ignorance.\textsuperscript{177} Borden stands in direct contrast with the Court’s decisions in \textit{Royal Milling} and \textit{Algoma Lumber}, which held that consumers “have a right” to purchase “a given article because it was made by a particular manufacturer . . . and this right cannot be satisfied by imposing upon them an exactly similar article, or one equally as good.”\textsuperscript{178} Borden also leads to a legal anomaly: anti-dilution law recognizes and fosters persuasive advertising, whereas price discrimination law ignores the same persuasive value and unreasonably impairs the ability of producers to capitalize on their investment.

Moreover, Borden leads to absurd results. For example, under Borden, absent a patent, two manufacturers may produce the same product under different brands and charge their respective retailers different prices without being subject to the RPA. However, a manufacturer that charges different prices for the same product sold under different labels would be subject to the “flexible” and nebulous “injury to competition” and “cost justification” provisions although there is no economic rationale to treat the two cases differently. Borden also gives rise to a chilling effect. Subjecting manufacturers to the more flexible tests of the RPA deters them, \textit{ex ante}, from selling the same product under different brands, thus limiting competition in the psychic space.\textsuperscript{179}

This article’s analysis argues that a manufacturer should be allowed to sell physically identical goods under different marks and command different prices without being subject to antitrust inquiry. Competition in this model occurs in two dimensions: the physical space and the psychic space. The following example is illustrative. Consider an economy with two producers. Producer A manufactures a widget at price $P_A$, branded with a trademark of renown $T_A$, and producer B manufactures the same widget at price $P_B$, branded with a trademark of renown $T_B$, such that $T_B > T_A$ and $P_A \neq P_B$. The price of each widget can be broken into three components: the

\begin{footnotesize}
\textsuperscript{177} FTC v. Algoma Lumber Co., 291 U.S. 67, 78 (1934).
\textsuperscript{178} FTC v. Royal Milling Co., 288 U.S. 212, 216 (1933); \textit{see also} Borden, 383 U.S. at 651-52 (Stewart, J., dissenting) (“Commercially the ‘advertised’ brands had come in the minds of the public to mean a different grade of milk. The public may have been wrong . . . it may have been right . . . . But right or wrong, that is what it believed, and its belief was the important thing.”).

[A] Private Label product identical to the Corporation’s brand product, except that it carries a distributor’s label, should be sold at the same price as the Corporation’s brand is sold to the Corporation distributor . . . [and] a sale to a Private Label distributor should be at the same price as a sale to a brand name distributor. No variation from standard pricing should be granted without a written analysis as to why the price was charged, e.g., to meet competition or differences in cost or performance . . . .”

\textit{Id.} at 1292-93.
\end{footnotesize}
price for the tangible product itself; the premium charged for the information embedded in the mark with regard to the products’ physical qualities; and the premium charged for the psychological freight. The two producers are in direct competition in the market for the physical good, and thus its price will be less than a monopoly price. There is no competition, however, in the market for fame because $T_B > T_A$, and so the prices consumers are willing to pay for the two widgets’ psychological freight will differ (because consumers are, in fact, receiving products of different value).

In this setting price discrimination may lower prices. Cartier and Swatch, for example, are brand names that (ignoring quality differences) compete in a market for tangible goods—watches. Cartier, however, sells an “image” of luxury, while Swatch sells an “image” of being young in spirit and hip. Allowing each producer to manufacture the same article under different labels and charge different prices will enhance social welfare because it will result in an increase of output of the physical product, and assuming economies of scale, decrease marginal costs of production. It will also enable competition in the market for psychological freight. Cartier might sell the same watch under a brand aimed at young spirited consumers, thereby competing with Swatch. This will lead to a reduction in the fame premium (up to the marginal cost of branding) and result in a total decrease in price. Price discrimination in this setting is desirable.

Price discrimination may be also desirable even in the absence of competition. Assume that a manufacturer that enjoys a monopoly in a product market (perhaps because of a patent) decides (because of *Borden*) to market its product under one label only. As a monopolist, the manufacturer will choose the output $Q_1$ and branding investment leading to trademark fame of $T_1$, which will maximize its profits. Enabling the monopolist to sell more of the same product under different labels with a different trademark level $T_2$ ($T_2 \neq T_1$) will lead to an increase in output of the same physical product. Assuming without limitation that $T_2 < T_1$, consumers who could not afford the more prestigious product would be able to purchase the same physical product under the less prestigious label ($P_2 < P_1$). The increase in output is also likely to cause a further decrease in the marginal cost of production. Allowing a monopolist to price discriminate is therefore a Pareto superior solution.

In *Borden*, the Supreme Court provided two examples to explain why transactions involving physically identical products bearing different labels are “too laden with potential discrimination and adverse competitive effect” to be excluded from RPA’s reach. These examples, however, do not support the court’s view.

---

180 *Borden*, 383 U.S. at 643-44.
First, the Court deplored that a “retailer who was permitted to buy and sell only the more expensive brand would have no chance to sell to those who always buy the cheaper product.”\textsuperscript{181} The Court failed to recognize that the two products are not substitutes. The branded product and the unbranded one constitute two different products that provide different values to consumers. Consumers who are willing to pay more for the nationally advertised label do not do so because they are ignorant or irrational. They are willing to pay more because they receive added value from the famous label. Consumers of the cheaper brand may not be potential consumers of the famous label. Thus, the retailer of the branded product is not harmed.

Merger analysis applies this more sensible approach.\textsuperscript{182} In \textit{Gillette}, the District Court for the District of Columbia arrived at the opposite conclusion in discussing the relevant market for merger analysis.\textsuperscript{183} Gillette wanted to merge with Parker Pen Holdings.\textsuperscript{184} The Department of Justice sought to enjoin the merger on the ground that it would reduce competition.\textsuperscript{185} The court found that the fountain pen market can be divided into three sub-markets: “base” pens (less than $50); “premium” pens ($50 to $400); and “jewelry” pens ($400 and up).\textsuperscript{186} Premium pens, it reasoned, do not compete with base pens because premium pens “afford their users (as well as those who merely put them in their breast pockets) image, prestige, and status.”\textsuperscript{187} Because of this prestige component, should the price of a premium pen rise, “consumers will nonetheless purchase the now-costlier pen rather than substitute a less expensive, less prestigious model.”\textsuperscript{188} Thus the Court concluded that the two types of pens are not in competition because one conveyed an image—an intangible value—that the other did not.\textsuperscript{189}

\textsuperscript{181} \textit{Id.} at 644.
\textsuperscript{183} United States. \textit{v.} Gillette Co., 828 F. Supp. 78, 80-82 (D.D.C 1993) (analyzing facts under \textsection 7 of the Clayton Act, 15 U.S.C. \textsection 18, and finding the relevant product market to be all premium writing instruments with suggested retail prices from $50 to $400).
\textsuperscript{184} \textit{Id.} at 80.
\textsuperscript{185} \textit{Id.}
\textsuperscript{186} \textit{Id.} at 83.
\textsuperscript{187} \textit{Id.} at 82.
\textsuperscript{188} \textit{Id.}
\textsuperscript{189} \textit{Gillette}, 828 F. Supp. at 82. The court’s analysis is intuitively compelling: “Fountain pens in the $50 to $400 range effectively do not compete with fountain pens either below or above that range . . . . In contrast to fountain pens with [suggested retail prices] below $50, the fountain pens [in the $50 to $400 range] afford their users (as well as those who merely put them in their breast pockets) image, prestige, and status. In accordance with this prestige, manufacturers, retailers, and purchasers of the pens recognize that there is a distinction between these pens, which . . . are priced at approximately $50 and up, and those pens below $50.”
The second example given by the *Borden* court concerns the sale of the same commodity at different prices by two retailer-owned labels:

If Borden packed for one wholesale customer under two private labels, one having more consumer appeal than the other because of the customer’s own advertising program, Borden must sell both brands at the same price it charges other private label customers because all such milk is of the same grade and quality. At the same time, the [wholesaler] buying from Borden under two labels could himself sell one label at a reduced price without inquiry under §2(a) because the milk in one container is no longer of the same grade and quality as that in the other, although both the milk and the containers came from Borden. Such an approach would obviously focus not on consumer preference as determinative of grade and quality but on who spent the advertising money that created the preference—Borden’s customer [the wholesaler], not Borden, created the preference and hence the milk is of the same grade and quality in Borden’s hands but not in its customer’s. The dissent would exempt the effective advertiser from the Act. We think Congress intended to remit him to his defenses under the Act, including that of cost justification.\(^\text{190}\)

The so-called “effective advertiser” should be rewarded because it was that “advertiser” who created the added value (that is, the psychological freight).\(^\text{191}\) Thus, the advertiser should be able to sell a physically identical product at different prices without being subject to the risk that he may be found liable for antitrust violation. Exempting the advertiser from the risk of the RPA will unambiguously lead to an increase in output and total welfare. This proposed regime has been adopted in Canada.\(^\text{192}\) Section 50(1)(a) of the Canadian Competition Act is very similar to Section 2 of the RPA.\(^\text{193}\) It prohibits any seller from discriminating, directly or indirectly, in price between different purchasers “of articles of like quality and quantity.”\(^\text{194}\) Yet the enforcement agency takes the view that a trademark or label alone, to the extent that it gives rise to a consumer preference which is reflected in the price consumers are willing to pay for an article, is sufficient to distinguish otherwise similar articles.\(^\text{195}\) In circumstances mirroring the facts of *Borden*, Canada’s enforcement guidelines allow that “the brand differentia-

---

191 See id. at 645 n.6.
tion will generally be sufficient to cause the Director to conclude that the articles are not of ‘like quality.’”\(^{196}\) It is suggested here that a similar interpretation be adopted with regard to the RPA.\(^{197}\)

2. “Commodities,” Famous Brands, and the Tangibility Requirement

Even if the *Borden* decision holds, the RPA still may not apply where products are sold under famous marks because such products may not be considered “commodities” for the RPA’s purposes. Section 2(a) of the RPA provides that it is unlawful for a seller to either directly or indirectly discriminate in price between different purchasers of commodities of like grade and quality.\(^ {198}\) Although the RPA contains no definition of the term “commodity” courts have interpreted the term to apply only to tangible products.\(^ {199}\) Thus, it has been held, for example, that the RPA does not apply to the sale of services,\(^ {200}\) mutual fund shares,\(^ {201}\) or licensing agreements.\(^ {202}\) The distinction between tangible products (which are subject to the RPA) and intangible ones (which are not), however, is not always clear. This is because a transfer of a tangible asset is often accompanied by a transfer of an intangible asset. To determine whether a certain transaction

\(^{196}\) Id.

\(^{197}\) During a House hearing on the legislation, it was proposed that § 2(a) be amended to read “like grade and quality and brand” so that discrimination between different brands would be allowed. *To Amend the Clayton Act. Part 2: Hearing on H.R. 4995 and H.R. 8442 Before the H. Comm. on the Judiciary*, 74th Cong. 421 (1936). The amendment was not adopted. During the debate on the bill, Rep. Patman was asked about the private-label issue. *See 80 Cong. Rec. 8115 (1936) (statement of Rep. Taylor).* In response, Rep. Patman stated that, “the bill will protect the [retailers who use private labels] . . . because they will have to sell to the independents at the same price for the same product where they put the same quality of merchandise in a package . . . [irrespective of the brand] so long as it is the same quality.” *Id.* (statement of Rep. Patman). But the dissent in *Borden* argues:

> [O]n its face, Mr. Patman’s statement makes the blanket assertion that all products of the same quality must be sold at the same price. As thus stated, premium brands would have to be sold at the same price as private label brands . . . . These undifferentiated remarks are therefore of little assistance in the determination of congressional intent.

*Borden*, 383 U.S. at 654 (Stewart, J., dissenting).


\(^{199}\) *See, e.g.*, Advanced Office Sys., Inc. v. Accounting Sys. Co., 442 F. Supp. 418, 422 (D.S.C. 1977) (“Courts have uniformly held that the term ‘commodities’ as used in the Robinson-Patman Act . . . is restricted to products, merchandise, or other tangible goods . . . .”); *La Salle St. Press, Inc. v. McCormick & Henderson, Inc.*, 293 F. Supp. 1004, 1006 (N.D. Ill. 1968) (stating that a patent license agreement is an “intangible right” and not covered by the RPA), *aff’d*, 445 F.2d 84 (7th Cir. 1971).


\(^{201}\) *Baum v. Investors Diversified Servs., Inc.*, 409 F.2d 872, 876 (7th Cir. 1969).

\(^{202}\) *La Salle St. Press*, 293 F. Supp. at 1004.
falls under the provisions of the RPA, courts rely on the “dominant nature of the transaction.” In Freeman, for example, the Seventh Circuit found that the RPA does not apply to the sale of title insurance, even though the insurer provided the purchaser with a tangible product—a document. The court explained that the performance of a service, and not the delivery of a physical document which embodies that service, constitutes the dominant nature of the transaction.

Because a product sold under a famous mark is comprised of tangible and intangible products, it should not be considered a commodity. This is especially the case where the psychological asset is the true product and the tangible product is nothing but a platform. In such cases, the “dominant nature” of the product is its intangible aura, and therefore its sale should not be subject to the RPA. Under this approach, the sale of a branded good is a two-part transaction: a complete sale of a physical product (and information regarding that product) and a licensing agreement that gives the consumer the right to use and enjoy the psychological asset attached to the product. As part of this license, the producer promises to maintain the mark’s fame, such as by prosecuting infringers or third parties who cause dilution. The licensing of intellectual property (although in other contexts) has been already recognized by the federal courts as not subject to the RPA. Exempting branded products that embody intangible products, therefore, is consistent with prior cases.

---

203 Tri-State Broad. Co. v. United Press Int’l, Inc., 369 F.2d 268, 270 (5th Cir. 1966) (“Virtually no transfer of an intangible in the nature of a service, right, or privilege can be accomplished without the incidental involvement of tangibles, and we conclude that in such circumstances the dominant nature of the transaction must control in determining whether it falls within the provisions of the Act.”). The “dominant nature” test is not applicable, however, when the two products—the tangible and intangible—can be sold separately. See, e.g., Metro Comm’n Co. v. Ameritech Mobile Comm’n’s Inc., 984 F.2d 739, 745 (6th Cir. 1993). In such cases, only the physical product would be subject to the RPA. See, e.g., id.

204 Freeman v. Chicago Title & Trust Co., 505 F.2d 527, 531 (7th Cir. 1974).

205 Id.; see also Kennedy Theater Ticket Serv. v. Ticketron, Inc., 342 F. Supp. 922, 926 (E.D. Pa. 1972) (holding that a right to a seat in a theater is the dominant nature of the transaction, even though the theater ticket is tangible).

206 Dominant nature is not determined merely by breaking down the costs of the intangible service and the accompanying tangible good, although it has been held that such a comparison might be useful as one of many factors to consider. See May Dep’t Store v. Graphic Process Co., 637 F.2d 1211, 1215 (9th Cir. 1980).

207 See supra Part III.C.1.

208 La Salle St. Press, Inc. v. McCormick & Henderson, Inc., 293 F. Supp. 1004, 1006 (N.D. Ill. 1968) (holding that a patent license agreement granting the right to use a particular method or process is not a “commodity”).
3. A Practical Note

Although *Borden* and the Supreme Court’s policy have been subject to much scholarly attention, RPA cases regarding the sale of branded and unbranded products at different prices are not very common. Several reasons may account for this phenomenon. First, agency enforcement of the RPA has decreased dramatically in recent years. Private litigation is also declining due to the RPA’s strict requirements and judges’ skepticism about the injurious effects of price discrimination. The judge-made availability doctrine provides another explanation. Under this doctrine, if a seller offers different prices for a commodity to different buyers, but the lowest price is available to all, there is no RPA liability. Applying the availability theory to the dual-branding setting, there should be no RPA liability where a manufacturer offers its customers both the premium and non-premium brands.

Yet RPA liability is a valid concern. To begin with, private RPA enforcement, fueled by the prospects of treble damages, is still commonplace. Moreover, availability doctrine is not a comprehensive defense. To rely on the availability doctrine, the manufacturer must demonstrate that the lower price was *practically* available to its customers and that they were *informed* of its availability. Thus to employ the availability defense, a manufacturer must inform its customers that its branded and unbranded products are physically identical. But, as Callmann notes, “[t]o insist that the manufacturer reveal the true facts [about the physical identity] would lead to the

---

209 The Department of Justice’s Antitrust Division has never used its authority to prosecute under Section 2 of the RPA and has been openly critical of the Act. See United States Department of Justice, Report on the Robinson-Patman Act 149, 169 (1977) (“[T]he Act is made inherently capable of serious harm to society; indeed the more the statute is enforced and the more it is complied with, the greater becomes its harmful effects [sic] on competition.”); see also WILLIAM C. HOLMES, ANTITRUST LAW HANDBOOK § 4-2 (2005); EARL W. KINTNER & JOSEPH P. BAUER, FEDERAL ANTITRUST LAW § 30-3 (1983); ROBERT PITOFSKY ET AL., TRADE REGULATION 1290 (5th ed., 2003); IRVING SCHER, ANTITRUST ADVISOR § 9-40 (4th ed. 2005). Similarly, since 1980, the FTC has attempted to enforced the Act only twice. See PITOFSKY ET AL., supra note 209, at 1290. Of these two attempts, the first was abandoned and the second settled. *Id.*

210 See PITOFSKY ET AL., supra note 209, at 1290.

211 Indeed, the dissent in *Borden* applied this approach. FTC v. Borden Co., 383 U.S. 637, 659-60 n.17 (1966) (Stewart, J., dissenting) (“[S]o long as Borden makes private label brands available to all customers of its premium milk, it is unlikely that price discrimination within the meaning of § 2(a) can be made out.”).

termination of that system of dual distribution." Thus the applicability of the doctrine in the trademark context is not practical.

Furthermore, the scope of the doctrine may be limited so as to provide defense only against injuries to end customers. This is because the conceptual basis underlying the doctrine is unclear. It is an unsettled matter whether availability of the lower price simply negates a finding of price discrimination, or instead whether it is a defense against the substantial injury requirement. If the former, availability would provide absolute immunity to the manufacturer-seller. Under this view, dual pricing creates only a price differential but not price discrimination. If, however, availability is a defense only against injury, then it would bar only the disfavored customer—who had the option to buy the same commodity at a lower price but chose not to do so—from asserting an injury, but would be no bar to the manufacturer’s competitors, who lost sales because of the dual pricing. Manufacturers who wish to use dual pricing are therefore still exposed to antitrust liability.

213 CALLMANN, supra note 31, § 5-74.

214 For authorities holding that the availability of lower price negates the finding of price discrimination, see Rod Baxter Imps. Inc. v. Saab Scania of Am., Inc., 489 F. Supp. 245, 248 n.2 (D. Minn. 1980); HOLMES, supra note 204, at 628; PITOFSKY ET AL., supra note 209, at 1285; SCHER, supra note 209, at § 4-64. For authorities raising both bases as possible explanations, see Delong Equipment, 887 F.2d at 1517; KINTNER & BAUER, supra note 209, § 19-5; Ira M. Millstein, The Status of "Availability" Under Section 2(a) of the Robinson-Patman Act, 42 N.Y.U. L. REV. 416, 417-18, 426 (1967).

215 See KINTNER & BAUER, supra note 209, §§ 20-18, 25-7; SCHER, supra note 209, § 4-17; Millstein, supra note 214, at 427-28. But not all agree:

It is arguable that any injury which results to competitors of the seller, which lose sales because of the selective price cutting, indeed flows from that discrimination regardless of the options which were open to the disfavored buyer; it might then follow that primary line actions are not covered by the “availability” defense. . . . [Other] courts . . . have concluded that [the] second line analysis is preferable. Furthermore, at least one court has accepted this [view] and has suggested that primary line actions might not be barred by the availability defense. . . . [Others] accepted have [that] . . . the refusal by a buyer of a reasonable available offer of goods at an equally low price bars all types of price discrimination actions. [They explain that] any injury that competing sellers suffer is not the result of the price discrimination but rather the result of the lower price offered to, and accepted by, some buyers. If all buyers had accepted the lower price freely made available to them, the competing sellers would have suffered even greater injury. . . . [T]here is absence of the necessary nexus between the lower price to some buyers and the injury to the competing sellers.

KINTNER & BAUER, supra note 209, § 25:7, at 455; see also Millstein, supra note 214, at 445.
IV. A FORMAL APPROACH

A. The Basic Model

This Part provides a formal model which shows that the demand for a branded product is comprised of three components: the demand for the physical product itself; the demand for information regarding the product’s credence qualities (qualities that cannot be verified even post-purchase); and the demand for the intangible aura, status, or satisfaction that is annexed to the tangible product. The model is related to that of Stigler and Becker (“S&B”) and Becker and Murphy (“B&M”). Yet it differs in several important aspects. While B&M’s model regards the markets for goods and ads as complements that can be purchased separately, the model here regards them as inseparable. In certain circumstances one cannot purchase and consume an advertisement (and its effects) without buying the physical product it promotes. More importantly, it does not assume that persuasive advertising “gives favorable notice to other goods.” In this respect, it also deviates from signaling models, in which the role of advertising is limited to imparting information about the physical product that branding endorses. Here, branding creates a new intangible good, which must piggyback on the physical one. Moreover, S&B conclude that absent asymmetric information, branding will not occur. Conversely, the model developed below explains why branding may occur in a market with incomplete information as well as in a perfectly competitive market. The model also differs from the prior literature in that it provides a theoretical framework that takes into account both the informational and persuasive value of advertising and marks.

Dilution, persuasive branding, and price-discrimination are all intra-brand phenomena. Thus, to model the impact of persuasive branding, I

\[\text{References}\]

216 See Stigler & Becker, supra note 32, at 84-85, 87-89.
217 See Becker & Murphy, supra note 13, at 941-45.
218 Id. at 942.
219 Id. at 942, 945. Becker and Murphy’s thesis also differs from this article’s because it argues that advertisements “create wants” and increase the demand for the physical product. Id. at 941, 945.
220 This approach to the signaling model is primarily attributed to Phillip Nelson. See supra note 32 and accompanying text.
221 See Stigler & Becker, supra note 32, at 84-85.
222 “Intra-brand” and “inter-brand” denote two distinct phenomena in this article. “Inter-brand” activity refers to consumers’ decisions, which necessarily involve two or more manufacturers. Traditionally, trademarks’ roles have been said to be limited to inter-brand settings. They help consumers identify the product they want from a set of substitutable products available in the marketplace. Inter-brand settings often involve a consumer’s decision about whether she should choose a product manufactured by producer A over a product manufactured by producer B. Similarly, trademark infringement is
rely on a model I developed elsewhere to analyze the role of trademarks and branding in intra-brand settings. The model focuses on products which are characterized by credence qualities (qualities that cannot be verified even post-purchase) in a world of asymmetric information—that is, the seller is assumed to know his product’s qualities, but the consumer does not. This analysis shows that consumers of such products incur uncertainty costs which cannot be eliminated absent trademarks or similar mechanisms.

For example, assume that a consumer at the local Starbucks wishes to add sweetener to her coffee. She can choose “Equal,” “Splenda,” or “Stevia”—to name three of the most common brands. Assume further that she has already made her (inter-brand) decision to purchase Splenda because she likes its taste most (an experience quality). Aware of the risks of using aspartame-based products, over-consuming calories and carbohydrates, and diabetes, she wants to know a sweetener’s nutritional attributes before consuming it. If it is a low calorie sweetener or if it is made from an ingredient that makes it suitable for people with diabetes, she will use it generously; if high in calories or aspartame-based, she will purchase less of it. Because she is uncertain whether she faces a “high quality” product or a “low quality” one, she may make a costly mistake.

The basic model describes a two-step minimization process, which, although simultaneous in reality, is broken into two parts for simplicity and clarity. In the first stage the buyer chooses her strategy. Based solely upon her demand curve, the price offered (P₀), and her own beliefs about the product’s credence qualities, the buyer decides the optimal quantity she should purchase. The optimal quantity is that which minimizes her expected cost from an erroneous choice. As will be shown, although the buyer can and will minimize her error costs, she cannot eliminate them altogether. This minimal (but positive) expected error is, therefore, her subjective demand for information about the product’s physical attributes—that is, the amount she would be willing to pay to reduce her error. In the second stage, the seller chooses his strategy. Once the buyer has minimized her error cost, the seller decides whether to use a trademark (or other methods of marketing) to convey information about his product’s physical qualities. The seller can decide either to inform the consumer about his product’s credence attributes or to remain silent. If the seller decides to brand his product and

an inter-brand phenomenon. When producer A palms off his goods as producer B’s, inter-brand confusion is created. “Intra-brand” refers to decisions at the manufacturer level. For example, once a consumer has decided which product she should buy, the next question is how many units of that product to consume. This calls for intra-brand analysis. Similarly, when a seller claims that his own products possess attributes they actually do not contain, intra-brand confusion arises. A producer’s decision to brand identical physical product under different trademarks is also an intra-brand decision. For a comprehensive discussion of the intra-brand function of trademarks see Dilbary, supra note 72).

See id.
convey additional (yet truthful) information to buyers, that activity will minimize further the expected error cost and (where the product is of high quality) thereby increase sales. Trademarks thus lead to increase in sales by reducing buyers’ subjective probability of erring. After discussing the informational role of trademarks, the model is extended to persuasive branding.

1. The Consumer Strategy

Assume the consumer has already made a decision to purchase a certain product (e.g., Splenda) but is unsure whether the product is of high or low quality. That is, the consumer is unsure which of the two linear inverse demand functions she faces:

\[ \begin{align*}
D_1^{-1}: P &= a_1 - bQ \\
D_2^{-1}: P &= a_2 - bQ
\end{align*} \]

The first, \( D_1^{-1} \), stands for a “high-quality” product (the no-calorie sweetener in the example), and the second, \( D_2^{-1} \), stands for a “low-quality” product, where \( a_1 > a_2 > 0 \), and \( b > 0 \).\(^{225}\) Note that the difference in the demand intercepts \( a_1 - a_2 \), which I refer to as the “error span”)\(^{225}\) is the per-unit quality difference or, in other words, the marginal price difference between a high-quality product and a low-quality product. This error span is

\[ Q_C - Q_A = (a_1 - a_2)/b, \quad d = |Q_C - Q_A| \]

is a linear transformation of the “error span.”

---

\(^{224}\) For simplicity, I assume that there are only two possibilities: a “high-quality” product and a “low-quality” product. For use of a similar assumption see Sanford J. Grossman, The Informational Role of Warranties and Private Disclosure about Product Quality, 24 J.L. & ECON. 461, 471 (1981). This article differs from Grossman’s in several respects. Grossman considers two cases, one in which a seller makes quality statements which are \textit{ex post} verifiable, and another in which the statements are too costly to verify \textit{ex post} but nevertheless have some characteristics which are observable \textit{ex post}. For example, the quality of a car is hard to verify, but it is easy to observe whether it breaks down. This article, on the other hand, discusses credence qualities which are not verifiable and not observable \textit{ex post}. In the above example, the consumer would not know even post-purchase whether the sweetener contains aspartame or is high in calories. Also, unlike Grossman, I do not assume that the seller’s statements are truthful or that the consumer can only purchase one unit. Rather, I assume the seller may want to mislead consumers and that the consumer is purchasing any number of units. One aim of this model is to investigate how the number of units purchased is affected by a seller’s fraudulent misrepresentations. Moreover, Grossman discusses warranties as a signal that leads to a separating equilibrium: consumers can distinguish between good products (for which warranties would be offered) and bad products. In the context of trademarks, however, a separating equilibrium does not necessarily occur. A low investment in a mark does not necessarily indicate that the physical product is of low quality. \textit{See infra} note 234.

\(^{225}\) Because \( Q_C - Q_A = (a_1 - a_2)/b, \quad d = |Q_C - Q_A| \) is a linear transformation of the “error span.”
constant for every quantity (Q). For example, if \( P_1 = 100 - 10Q_1 \) and \( P_2 = 80 - 10Q_2 \), then for every unit Q, the consumer values the no-calorie sugar-based sweetener which is suitable for people with diabetes $20 more than if it were a high-calorie or aspartame-based one. I assume that the only difference in the intercepts is due to these credence qualities.\(^{226}\)

Figure 1: The Expected Cost Due to Uncertainty

Because she lacks information about the tangible product, the buyer is uncertain about the product’s credence qualities. In the example, she is uncertain whether the sweetener is low in calories and contains no aspartame.\(^{227}\) Thus she is uncertain whether she faces \( D_1 \) or \( D_2 \) in Figure 1. The buyer’s belief about the product’s quality can be represented by specifying a probability distribution on Q. Because the model assumes that there are only two possible states of the world (high-quality products versus low-quality products), \( \theta \) denotes the probability that the buyer places on the product’s quality.\(^{228}\) More specifically, the buyer believes that the probability that the product is of high quality is \( \theta \) and that the probability that the product is of low quality is \( 1 - \theta \) (where \( 0 \leq \theta \leq 1 \)). The buyer may decide

\(^{226}\) For simplicity, I also assume a level of \( P_0 \) such that \( a_1 - a_2 < P_0 \). This assumption simplifies the model by ensuring that the first minimization (the buyer’s strategy) could be easily illustrated graphically.

\(^{227}\) There are many other examples of credence qualities. For example, a consumer may be interested to know whether a product was made in a certain locality (such as Champagne, Roquefort or China), whether a product contains or is free of certain ingredients (such as sugar, fat from animals, etc.), whether it is dairy, kosher or tested on animals, or is hand-made, recyclable, etc. None of these are easily verifiable or observable \textit{ex post} by the consumer.

\(^{228}\) It is assumed that the probability of the “high quality” state of the world is known to the seller and that the consumer cannot affect the probability of the states.
that the product is of high quality and purchase \( Q_c \) units, or that it is of low quality and thus purchase \( Q_A \) units. But if she mistakenly thinks the product is high quality when it is not, she will purchase \( Q_c \) units and incur a cost illustrated by the area \( ACE \), which is the difference between what she paid, \( P_0CQ_cO \), and what she received, \( P_0AEQ_cO \). In discrete terms, she will incur a cost which is the summation of the difference between what she paid for each product (\( P_0 \)) and its value to her (presented by the downward-sloping demand curve). Conversely, if she believes mistakenly that the product is of low quality, she will purchase \( Q_A \) units and incur a loss denoted by the area \( FAC \).

But the buyer has a third choice. She can consume any quantity \( Q \) such that \( Q_A < Q < Q_c \). To find \( Q^* \), which minimizes the consumer’s error cost, I choose arbitrarily a quantity \( x \) with the only limitation that \( Q_A < Q < Q_c \). \( x \), therefore, serves as a “dimmer;” the larger it is, the closer the quantity purchased is to \( Q_c \). The smaller it is, the closer the quantity is to \( Q_A \). On the extremes, if \( x = 0 \), the buyer purchases \( Q_A \) units, and if \( x = Q_c - Q_A \) the buyer purchase \( Q_c \) units. For every \( x \), it is possible to formulate a general expected error function:

\[
(3) \quad E(e^X) = (1 - \theta)S_{ABD} + \theta S_{GBC}; \quad 229 \\
(4) \quad E(e^X) = \frac{bx^2}{2} - \theta(a_1 - a_2)x + \frac{\theta(a_1 - a_2)^2}{2b}
\]

The buyer, without any additional information and relying solely upon her knowledge about the relevant demand curves, will try to avoid the costs that follow from an error in the assessment of the product by choosing an \( x^* \) that minimizes her expected error cost. Rearranging the first-order condition in equation (4) yields \( x^* \) (and thus \( Q^* \)), which brings the expected error function to its extremum:

\[
(5) \quad \frac{dE(e)}{dx} \Rightarrow x^* = \frac{\theta(a_1 - a_2)}{b} > 0
\]

\[
(6) \quad E(e^{X^*}) = \frac{(a_1 - a_2)^2}{2b}[\theta(1 - \theta)]
\]

**Proposition 1:** \( x^* \), which brings the expected error cost to a minimum, will be always positive, and the buyer will thus always choose \( Q^* \) such that

229 Or, more generally: \( E(e^X) = (1 - \theta)(P_o - D_1) + \theta(D_2 - P_o) \).
Q_A < Q^* < Q_C. Put differently, in a world with uncertainty, the buyer will never chose Q^* such that Q^* is equal to either Q_A or Q_C.\(^{230}\)

**Corollary 1:** From Proposition 1 and Equation 6, it follows that the expected error, E(e), is always positive and is smaller than the extreme cases in which the consumer purchases Q_A or Q_C units. That is, \(0 < E(e^{Q_A}) < E(e^{Q_C}) = E(e^{Q_C})\).

Corollary 1 implies that even after the buyer has minimized her error cost by choosing \(x^* > 0\), she will still have a positive error-cost, or put differently, a positive demand for information as denoted by Equation 6. She will be willing to buy information about the tangible product that costs no more than her minimum expected error cost.

**Proposition 2:** The higher the difference in quality, \(d|a_1 - a_2|\) (i.e., the larger the error span), the higher the maximal error the consumer incurs. The intuition behind this proposition is simple. The more impact a credence quality has on the utility a consumer extracts from the product, the higher the cost to the buyer of an erroneous decision (or mistaken valuation of that credence quality).

![Figure 2: The Relation between x and E(e) for θ = ½.](image)

Figure 2 summarizes the consumer’s strategy. It shows that at the extreme cases where Q=Q_A or Q=Q_C, the consumer’s expected error cost is at maximum (for \(θ = ½\)). The consumer can minimize her error costs by changing her consumption to \(x = x^*\) but she will still have to incur an error.

\(^{230}\) For a proof of this Proposition and this Part’s other propositions and corollaries, see *infra* Technical Appendix A.
2007] FAMOUS TRADEMARKS AND IRRATIONAL BELIEFS 653

cost of $E_{\text{Min}} = (a_1 - a_2)^2/8b$. I refer to this point $(x^*, E_{\text{Min}})$ as the “point of ignorance,” denoted by the letters $I_g$. The intuition behind this result is straightforward. Because, at the first stage of minimization, the buyer has no information about the product—she is ignorant as to its credence attributes—she has a 50% chance of making an error (that is, $\theta = 1/2$). Any information about the product or the service—that is, any (truthful) information which will either decrease or increase $\theta$—will make the consumer better off. But absent such additional information about the product, the consumer’s best strategy is to choose $x^*$ where her expected cost is minimal. $E_{\text{Min}}$ is, therefore, the consumer’s reservation price for information. The consumer will be willing to pay any sum of money for information regarding the product’s qualities so long as her minimum expected error cost, $E_{\text{Min}}$, is higher or equal to the cost of information.

2. The Producer’s Strategy

Proposition 3: The stronger the consumer’s subjective belief that the product is of high quality ($\theta > 1/2$), the higher the number of units the buyer will purchase.

---

231 The model can be easily extended to cases in which the consumer has prior information, so that $\theta \neq 1/2$. It can also be extended to discuss cases of false optimism (for example, when the consumer possesses a belief of $\theta = 0.75$ when she should have, based upon the objective information available to her, a lower $\theta$) and false pessimism.
Proposition 3 is crucial to understanding the Trademark Act. The profit-maximizing seller, being aware of Proposition 3, faces two options: He can either (a) increase the quality of his product and convey that information or (b) produce a low-quality product and convey false information about its credence qualities.232 If he chooses to raise his product quality, he can convey that information by using a trademark. “Splenda,” for example, has acquired a secondary meaning in the mind of consumers as denoting a “no calorie sweetener that’s made from sugar, so it tastes like sugar” that “is suitable for people with diabetes.”233 A trademark that provides positive information will increase θ (such that θ > ½) and lead to higher consumption (the mechanism is discussed below).234 This is illustrated in Figure 3 by a movement from the point of ignorance (Ig) to point F. At F, the buyer’s error costs decrease further (EF < E_Ig = E_min, Q_1 > Q_Ig), resulting in an increase in total welfare. Similarly, if the mark provides negative information about the product’s credence qualities (for example, when governmental regulations such as labeling requirements require the seller to do so), although the buyer will purchase less than she would had she been at the ignorance point (Ig), her error cost will nevertheless unambiguously decrease. This is illustrated by a movement from the point of ignorance to point G, where E_G < E_Ig and Q_2 < Q_Ig.

Rather than improving its product, the seller may choose to cheat. In this model, cheating is plausible and likely to occur because it is hard or even impossible for the buyer to verify the product’s credence qualities. The buyer cannot check (at a non-prohibitive cost) the active ingredients or the processes or location of manufacture. She is at the mercy of the seller whose product she chose to purchase. Thus, sellers of low quality products may choose to defraud consumers by providing false information to increase sales without incurring the cost of improving their products. For

232 Of course the seller always has the option of producing a low-quality product without engaging in fraud, but such behavior does not pose any concerns and is not discussed.
233 Splenda® No Calorie Sweetener FAQs, http://www.splenda.com/page.jhtml?id=splenda/faqs/nocalorie.inc#q1. Splenda® is made through a patented process that starts with sugar and converts it to sucralose, a non-carbohydrate no-calorie sweetener. See id.
234 The information conveyed by a mark will always be “positive” (in the sense that it will make the product more desirable). Each product can be thought of a function of a set of attributes, and producers will use their marks to highlight positive attributes of their product. McDonald’s, for example, can use its mark to impart information about its burgers’ taste and uniformity but perhaps not their nutritional value. Linguist Roger Shuy has narrowed down the message conveyed by the McDonald’s mark to “basic, convenient, inexpensive and standardized.” ROGER W. SHUY, LINGUISTIC BATTLES IN TRADMARK DISPUTES 99 (2002). One court has held that the prefix “Mc” denotes “quality, service, cleanliness and value,” or “Q.S.V.C.” Quality Inns Int’l Inc. v. McDonald’s Corp., 695 F. Supp. 198, 203 (D. Mass. 1988).
example, a seller could tout its cheese as a “Roquefort” although it was not made in France. In that case, the defrauded consumer would believe she is at point F but would actually be at point H, where her error costs are higher than at the point of ignorance \( (I_g) \). Cheating, as Figure 3 demonstrates, would result in increased sales but would reduce consumers’ welfare, at a magnitude of \( E_H - E_{\text{Min}} \). Furthermore, the model shows that even where fraud is implausible, one would expect low-quality manufacturers to say very little or nothing about their products’ credence attributes. By not conveying any information, low-quality sellers may be able to increase their sales.\(^{235}\) Not internalizing the buyer’s error cost, the seller will be able to sell \( x^* \) units at the point where \( \theta = \frac{1}{2} \). But this will be at some substantial cost to consumers.

The seller can influence the buyer’s subjective beliefs in several ways, one of which is using a trademark. This can be formally presented as:

\[
(7) \quad \theta = \frac{1}{2} + \delta LT
\]

where \( \delta \) is a dummy variable which is equal to 1 if the trademark conveys the information that the product is of high quality and equal to -1 if trademark conveys that the product is of low quality; \( T \) is an index of the trademark’s strength (\( T \) is equal to 0 where the product is not branded and increases with the trademark’s strength );\(^{236}\) and \( L \), which I assume to be constant, is the marginal change in the probability \( \theta \) caused by an increase in \( T \). Substituting \( \theta \) in Equation 6 with its formulation in Equation 7 and

\(^{235}\) The model leads to the conclusion that a pooling equilibrium will occur. In this regard, the model differs from the approach in the signaling literature, which views the presence of a warranty as a signal of a good product and its absence as a signal of a bad one. See generally William Boulding & Amna Kirmani, A Consumer-Side Experimental Examination of Signaling Theory: Do Consumers Perceive Warranties as Signals of Quality?, 20 J. CONSUMER RES. 111 (1993) (arguing that experimental results tend to show that “consumer responses to warranties are consistent with the behavioral assumptions of signaling theory”). In a trademark setting, on the other hand, the fact that a mark does not convey information about credence qualities (i.e., there is a low or zero branding level) will not lead to a separating equilibrium. For a separating equilibrium to occur, consumers must be able to observe and compare the same attribute in different products. Because a warranty is a signal of only one attribute—performance—consumers can infer that seller who does not offer a warranty has a product with low performance. Trademarks, unlike warranties, are used to impart information about many different attributes. Every seller can use its mark to convey information about the attribute for which its product is most valued. One could use the mark to convey a information about a certain taste, another to convey a certain smell, a third to convey the existence or absence of an ingredient, a fourth to convey a process and so on. In such a setting the only thing a consumer may infer from the existence of a mark is that the attribute for which the mark has gained a secondary meaning may be the strongest quality of that product or at least a desirable one.

\(^{236}\) The magnitude of \( T \) is a primarily a function of advertising.
differentiating the achieved expression with respect to \( T \) reveals that the stronger the trademark is, the smaller the expected error costs become.

\[
(8) \quad E(e^O) = \frac{(a_1 - a_2)^2}{2b} \left[ \frac{1}{4} - \delta^2 L^2 T^2 \right] = \frac{(a_1 - a_2)^2}{2b} \left[ \frac{1}{4} - \delta^2 L^2 T^2 \right]
\]

**Proposition 4:** From Equation 8, it follows that where information is truthful, the buyer’s error costs are minimized regardless of the trademark’s negative or positive value. Whether the trademark conveys low or high quality (whether \( \delta = -1 \) or \( \delta = 1 \)), its strength (that is an increase in \( T \)) reduces \( E(e) \). This is illustrated in Figure 3’s depiction of the producer’s strategy.

**B. Extending the Model: Persuasive Branding**

I now turn to snobbism. I use interchangeably “famous” and “persuasive” to describe marks which influence buyers’ demand by adding psychological freight. In the basic model above, trademarks always reduced buyers’ error cost and increase sales by imparting information about the product’s credence qualities, but in the case of persuasive marks, the outcome is ambiguous. For persuasive marks, a trademark serves two roles. First, as in any intra-brand setting, it reduces consumers’ error cost and leads to an increase in sales (where \( \delta = 1 \)). Second, it also creates a pleasant feeling or portrays an image that makes the product more desirable or appealing. In its first hat, as a cost-reducer, a trademark has no impact on prices. In its second hat, when it creates an aura or a product appeal, it does. A persuasive mark increases the demand for the product, as illustrated in Figure 3, and thus increases the product’s price.

Formally, instead of the somewhat naïve description provided in Equations 1 and 2, I denote the inverse demand curve for a product whose trademarks enjoy high popularity (e.g., Ferrari, L’Oreal etc.) as follows:

\[
(9) \quad D^{-1}(p, f, n): P = a + \psi f(T, n, \varepsilon) - bQ;
\]

\[
D(p, f, n): Q = \frac{a + \psi f(T, x, a)}{b} - \frac{1}{b} P \quad \text{or} \quad Q = \frac{a + \psi f(T, x, a)}{b} - \frac{1}{b} P
\]

where \( f \) (for “fame”) is a popularity index, which is a function of the trademark strength \( T \), the number of competing firms \( n \), and other factors \( \varepsilon \) (such as pleasant design). I assume that an increase in \( T \) increases the product’s popularity \( (fT > 0) \) but that the marginal contribution is decreasing
(f"T < 0). That is, the stronger the trademark, the smaller the contribution of an additional unit of trademark strength to the product’s popularity. The demand for the product is thus dependant upon the price, P, and increases with an increase in the popularity, which implies \( \psi > 0 \). This specification no longer assumes that an increase in T has no influence on prices. In the case of persuasive marks, the seller has some ability to influence the price due to the popularity of his product in the marketplace. I also assume that the demand is influenced by the number of firms in the market, n. For example, in a geographic market where only Armani suits are available, I expect the demand to be higher than in a market where consumers can purchase Armani and Hugo Boss, ceteris paribus. This implies that D\'n < 0, f\'n < 0 for every increase in n. For this reason, it was argued above that allowing producers to sell the same tangible product under different labels for different prices would enhance competition and reduce prices. This could lead to increased production and more vibrant competition in the psychic sphere. The introduction of more firms (that is, increases in n) reduces “f” and leads to a decrease in the fame effect discussed below.

Holding the number of firms, n, constant and repeating the methodology employed for the basic model above allows calculation of the correlating quantities \( Q_E \) and \( Q_F \) (analogous to \( Q_A \) and \( Q_C \) above), the error span \( |Q_F - Q_E| = d \), and the quantity \( Q^* \) (see Figure 4):

\[
Q_E = \frac{a_1 + \psi f - p_1}{b}, \quad Q_F = \frac{a_1 + \psi f - p_1}{b}, \quad d|Q_E - Q_F| = d = \frac{a_1 - a_2}{b}
\]

\[
E'(e^x) = E(e^x) = \frac{bx^2}{2} - \theta(a_1 - a_2)x + \frac{\theta(a_1 - a_2)^2}{2b}
\]

\[
\text{Max } E'(e) \text{ at } \frac{(a_1 - a_2)^2}{2b}, \quad \text{Min } E'(e) \text{ at } x^* = \frac{\theta(a_1 - a_2)}{b} = x^*
\]

\[
E'(e^{0^*}) = E(e^{0^*}) = \frac{(a_1 - a_2)^2}{2b} \left[ \frac{1}{4} - \delta^2L^2T^2 \right]
\]

\[
x^* = \frac{(a_1 - a_2)}{2b} + \frac{\delta LT(a_1 - a_2)}{b}; \quad 0 < x^* < (a_1 - a_2)/b
\]

Note that Equations 10–14 are identical to those yielded under the basic model. This is because an increase in T does not impact the error span \( d|Q_E - Q_F| = d|Q_C - Q_A| = (a_1 - a_2)/b \) and consequently, \( x^* = x^* \). Thus the
minimum and maximum error costs remain the same. The increase in T
does, however, change the quantity $Q^*$:

$\begin{align*}
(15) \quad Q^* &= Q_A + x^* = \frac{a_1 + a_2 - 2P_0}{2b} + \delta LT (a_1 - a_2) \\
(16) \quad Q'^* &= Q_E + x^* = \frac{a_1 + a_2 - 2P_0}{2b} + \delta LT \frac{(a_1 - a_2)}{b} + \\
&\quad \left[ \frac{\psi f(T)}{b} - \frac{p(T) - P_0}{b} \right]
\end{align*}$

This enables a graphical representation of the dynamics of persuasive
branding. An increase in the trademark strength T has three effects.\textsuperscript{237} First,
an increase in T increases the “fame” of the product and makes it more appealing.
This, in turn, increases the demand for the product at a magnitude of $\psi f/b$. I refer to this impact as the “fame effect.” Figure 4 illustrates
the fame effect as a right shift of the demand curves. If all else is held equal
(specifically, P remains $P_0$) this shift would increase the quantity the buyer
is willing to purchase and shift the error span from $[Q_A, Q_C]$ to $[Q_B, Q_D]$, such that $Q_B > Q_A$ and $Q_D > Q_C$. This, in turn, causes the point of ignorance
to increase so that the new point of ignorance, $x'^*$, would shift to K ($Q_D < Q'^*_K < Q_B$).

\textsuperscript{237} Equation (16) is broken down into four components. The first expression is the demand for the
physical product at the point of ignorance (thus it is independent of T). The second expression illustrates
the informational effect: it is the increase in demand for the physical product due to the favorable information
the trademark conveys about the product’s physical qualities. The third expression is the demand
for the intangible product, which piggybacks on the physical one (i.e., the fame, status or satisfaction
the consumer gains from consuming the product. The forth expression is the price effect caused by the
persuasive efforts.
Figure 4: The Impact of Persuasive Marks on Consumers’ Demand

But the increase in fame also causes a price effect which reduces the quantity by \((P_1 - P_0)/b > 0\), where \(P_1\) is the new price level. This is illustrated by a shift on the demand curves from the segment \([B, D]\) to \([E, F]\), which in turn causes the ignorance point to shift from \(K\) to \(I\). Finally, an increase in trademark level strength provides more intra-brand information about the product’s credence qualities, and so increases the quantity purchased by moving the consumer away from the new ignorance point I—an informational effect. This effect is of magnitude \(\delta L(T_1 - T_0)(a_1 - a_2)/b\) and causes a subsequent rightward shift on the horizontal line \([I, F]\). The three effects can be shown by calculating the difference in quantity before and after the increase in \(T\):

\[
(17) \quad d|Q^* - Q^*| = \frac{\psi f_1 - \psi f_0}{b} - \frac{P_1 - P_0}{b} + \delta L(T_1 - T_0) \frac{a_1 - a_2}{b}
\]

In sum, persuasive branding will cause the following changes:

(a) A fame effect of \(\frac{\psi (f_1 - f_0)}{b}; f = f(T)\)

(b) A price effect of \(-\frac{P_1 - P_0}{b}; P = P(T)\)
(c) An informational effect of \( \delta L(T_i - T_0) \frac{a_1 - a_2}{b} \)

**Proposition 5:** Ignoring the cost of branding (or where branding is costless), the informational effect is finite and reaches maximum.

Proposition 5 means that a monotonic increase in \( T \) will close, at one point, the informational gap, leaving only the price and fame effects. The intuition is simple. With an increase in \( T \), the buyer receives more information about the product’s credence qualities. At a certain level of \( T \), denoted by \( T^{\text{IMax}} \), the buyer has received all of the information she needs about the physical attributes of the product. She knows that she faces \( D_1 \) rather than \( D_2 \) (assuming \( \delta = 1 \), her subjective belief will be \( \theta = 1 \)). Once the consumer has full information, she moves from the costly point of ignorance to \( Q_C \) where her error costs are 0—point F in Figure 3. At that point, further investment in trademark (an increase in \( T \) such that \( T > T^{\text{IMax}} \)) will yield no additional informational effect. Thus, in a world where persuasive branding is prohibited, investment in trademarks will be finite, even when the cost of branding is zero.

But in the case of persuasive marks, the producer may continue to increase \( T \) above the informational maximum (\( T > T^{\text{IMax}} \)). This is because trademarks are not only a means to convey information about a product’s physical qualities; they also create a new intangible product which piggybacks on the tangible one. Once the trademark has provided full information about the product’s tangible credence qualities, the two demand curves denoted by \( D_1 \) and \( D_2 \) in Figures 1 and 4 collapse into one: the higher demand curve (if \( \delta = 1 \)). Because the information gap is finite (the error span does not change with an increase in \( T \)), the informational process must reach an end, at which point the two demand curves will become one. As of that point, the only two effects remaining are the fame effect—the extent to which increasing trademark strength increases the value of the intangible product—and the price effect.

This analysis explains one of the major flaws of the soft-liners’ approach. Soft-liners justify persuasive branding because of its informational effect. They fail to recognize, however, that such an effect is not unbounded. At a certain level of branding (\( T^{\text{IMax}} \)), a famous trademark conveys the information that the product is of high quality. Any further investment does not serve any informational purpose. Even the soft-liners, then, will side with the hard-liners and argue that any branding level \( T \) such that \( T > T^{\text{IMax}} \) is wasteful. The model above, however, proves that even
where the informational process ends, branding is not wasteful: It creates an intangible product that consumers value.\footnote{Empirical data demonstrates this flaw. See supra text accompanying note 18. If, as the soft-liners argue, persuasive advertising provides only information about the physical product, advertising outlays would be less where the cost of advertising and the dissemination of information are less. Yet the data show that despite the Internet and other cost-reducing mechanisms, advertising expenditures continue to increase. Id.}

**Proposition 6:** An increase in \( T \) will unambiguously lead to an increase in both the purchased quantity, \( Q^* \), and \( x^{16} \) (\( Q^{*'} > Q^* \), \( x^{16'} > x^{16} \)) so long as \( \psi f > p_1 - p_0 \), where \( P_1 \) is the new price level.

**Corollary 6:** From Proposition 7, it follows that so long as \( \psi f > p_1 - p_0 \), an increase in \( T \) leads to increases in output and prices.

Proposition 6 and its corollary imply that the anomaly of an increase in both price and output is possible. This phenomenon has been discussed often in the literature of conspicuous goods.\footnote{The literature on conspicuous goods distinguishes between “elitists” (sometimes “snobs,” but with a meaning different than that employed in this article), who prefer unique products (i.e., consumers whose purchase decision is based on residual demand), and “conformists,” who prefer goods which are popular amongst their peers. See infra note 240.} The conclusion to be drawn from that literature is that elitists (consumers who gain utility from the fact that other consumers cannot purchase a certain product) face an upward-sloping demand curve. Thus, an increase in price causes an increase in consumption; because fewer people can afford to buy the high-priced product, it becomes a better signal of exclusivity and therefore is more demanded by those who can afford it. Like the model presented in this article, the literature of conspicuous goods introduces social desires into the traditional consumer decision-making theory. Its focus, though, is relative consumption: the utility that elitists and conformists derive from a product is a function of the residual or aggregate demand of other consumers. Also, it focuses only on visible status-signaling goods and ignores the psychological satisfaction a product may confer. Thus, it is a prerequisite in that literature that a product must be conspicuous to convey the message of uniqueness or conformism.\footnote{Wilfred Amaldoss & Sanjay Jain, *Pricing of Conspicuous Goods: A Competitive Analysis of Social Effects*, 42 J. Mktg. Res. 30, 30-31 (2005); see also Gary S. Becker & Kevin M. Murphy, *Social Economics: Market Behavior in a Social Environment* 25H (2000); Thorstein Veblen, *The Theory of the Leisure Class: An Economic Study of Institutions* 52-76 (The Modern Library 1961) (1899); Harvey Leibenstein, *Bandwagon, Snob, and Veblen Effects in the Theory of Consumers’ Demand*, 64 Q.J. Econ., 183, 189 (1950) (defining Conformists—the opposite of Elitists—as those who prefer goods which are popular amongst their peers).} For this reason, the literature of conspicuous goods cannot explain the high premiums charged by sellers of inconspicuous goods.
Figure 5: The Expected Change in Q and P as a Function of an Increase in T.

The model advanced in this article, on the other hand, suggests that snobbism (willingness to pay more for the same physical product that can be purchased for less)\textsuperscript{241} can occur even with a downward-sloping demand curve. The model shows that under certain conditions an increase in price and output may appear \textit{simultaneously}: not as a cause (increase in price) and effect (increase in output) but rather as byproducts of an increase in branding efforts. This can be seen in Figures 4 and 5. A small increase in T will create a fame effect, which will shift the demand curves and thus the error span from $d|Q_C - Q_A|$ to $d|Q_D - Q_B|$, and a price effect, which will further shift the error span to $d|Q_E - Q_F|$, where the new price level is $P_1$.\textsuperscript{242}

The point of ignorance shifts to point K and then to point I, respectively. So long as the increase in price is such that $P < P_2$, the point of ignorance will increase, which implies an increase in total consumption. At a price level of $P_2$ the error span is $d|Q_H - Q_G|$, where $Q_A = Q_G$, $Q_C = Q_H$, and the point of ignorance at its pre-branding level. At price levels of above $P_2$, quantity may still increase, but at a decreasing pace. Here the informational effect and the price effect work in opposite directions. The error span (and therefore the new point of ignorance) is left of the original, resulting in a decrease in quantity absent an informational effect of greater magnitude. If, however, the informational effect is still positive and of greater magnitude than the price effect, an increase in consumption at a lower pace is expected. Figure 5 illustrates that at prices above $P_3$, where the price effect is of greater magnitude than the informational and fame effects, consumption will decrease.

\textsuperscript{241} For a similar definition, see Laurie Simon Bagwell & B. Douglas Bernheim, \textit{Veblen Effects in a Theory of Conspicuous Consumption}, 86 AM. ECON. REV. 349, 350 (1996) (defining “Veblen Effects” as “a willingness to pay a higher price for a functionally equivalent goods, arising from the desire to signal wealth.”).

\textsuperscript{242} Note that $d|Q_C - Q_A| = d|Q_D - Q_B| = d|Q_E - Q_F|$. 
C. Disaggregating Informative Branding from Persuasive Branding

Many scholars distinguish between persuasive branding and informative branding, praising the latter and demonizing the former. This model so far assumes only one type of branding, T, whose impact on both the informational and the fame effect is in the same direction. In other words, the dynamic of the model is such that every increase in T provides more information about the product’s physical qualities and creates a fame effect. Thus, in its current formulation, the model is incapable of describing the case in which a trademark is highly famous and, at the same time, provides only fuzzy information about the product; or a trademark that provides much information without creating a luxurious aura. Examples of both scenarios are abundant. Beer manufacturers, for example, heavily advertise their products using persuasive ads which contain very little informational value. Pharmaceuticals, on the other hand, are mainly touted for their medicinal qualities rather than the image they project.

Only a very modest modification to the model is necessary to distinguish between persuasive branding and informational branding. There is no need to assume that some advertisements are wholly informational while others are purely emotional. Indeed, every branding effort is a hybrid. I denote $0 < \alpha < 1$ as the fragment of the branding efforts (for example a commercial) which conveys information about the product’s credence qualities. I refer to “$\alpha T$” as the mark’s informative level. By using $\alpha$ it is possible to redefine $\theta$ and the error function in Equations 7 and 8 to be:

$$\theta = \frac{1}{2} + \delta L \alpha T$$  (18)

$$E(e^{q^*}) = \frac{(a_1 - a_2)^2}{2b} \left[ \frac{1}{4} - \delta^2 L^2 \alpha^2 T^2 \right]$$  (19)

$$x^* = \frac{(a_1 - a_2)}{2b} + \frac{\delta L \alpha T(a_1 - a_2)}{b}; \quad 0 < x^* < (a_1 - a_2)/b$$  (20)

Similarly, I define $0 < \beta < 1$ as the percentage of branding efforts which appeals to consumers’ emotions and psychology. Substituting for $f$ the function $f = \sqrt{\beta T}$, which, consistent with the requirements above, is increasing with an increase in T at the decreasing pace $f_T > 0$, $f''_T < 0$, yields the following outcomes:

It may well be the case the both $\alpha$, $\beta = 1$. If so, branding efforts will increase both the informational and fame effects, as was the case prior to this extension of the model.
CONCLUSION

This article offers a new rational basis for persuasive branding and anti-dilution law. It argues that, because of the state of technology and social norms, consumers cannot purchase status and prestige apart from physical products. Nor can they signal their refined taste without being considered rude or presumptuous. Rather, they must purchase a package which includes not only the physical product, but also information about that product and an image or satisfying feeling. To build on Demsetz’s example, an orthodox Jew is willing to pay more for food that is market kosher because of its physical characteristics (e.g., nutritional value), the information the mark conveys about a physical credence quality (the kosher mark informs the consumer that the food was prepared in accordance with Jewish tradition), and the mental satisfaction it offers (religious practice). These three demands are commingled.

The framework established in this article helps to clear the fog which surrounds the nebulous anti-dilution theory, and to allay the constitutional concerns which have been raised recently by scholars. It shows that persuasive branding and anti-dilution law are different sides of the same coin: the latter protects the value that the former creates in a mark. Contrary to common wisdom, however, both producers and consumers benefit from anti-dilution law. For producers, anti-dilution is forward looking, protecting a mark’s ability to attract new customers. For consumers, it is backward looking, protecting consumers’ investments from the hazards of an externality. Because consumers buy both a physical product and psychological freight but gain control only over the physical product, a third party may dilute the intangible psychological product for which the consumer paid dearly. By providing a cause of action to producers, the latter are able to
serve their traditional role as the avengers of the public. Not only do they protect themselves, but they also protect consumers’ intellectual property. Thus, anti-dilution theory cannot legitimately be christened “a radical and imprudent alternative to the consumer protection model of trademark rights.”

This framework also leads to the conclusion that producers should be able to command different prices for physically identical products bearing different marks, without being subject to antitrust liability or inquiry. Borden not only lacks any economic basis, but it may also thrust monopoly power upon producers. It stands in direct contrast to courts’ long-standing practice of defending consumers in their beliefs. Remedying this anomaly in the law will lead to an increase in output and welfare, the paramount end of antitrust law.

Finally, this framework supports the conclusion that certain markets may experience both an increase in price and output. This phenomenon should not lead to the conclusion of an upward-sloping demand curve. More likely, people are willing to pay more because they receive more, and this occurrence is consistent with a downward-sloping demand curve.

APPENDIX A (ECON PURE 16)

I. PROOF OF PROPOSITION 1

*Proposition 1:* $x^*$ which brings the expected cost to a minimum will be always positive and the consumer will thus always choose $Q^*$ such that $Q_A < Q^* < Q_C$. Put differently, in a world with uncertainty, the buyer will never chose $Q^*$ such that $Q^*$ is equal to either $Q_A$ or $Q_C$.

The proof of proposition 1 is straightforward. From equation (5), the first order condition of the error function in equation (4), it follows that $x^* > 0$ because both the nominator and the denominator are positive ($a_1 - a_2 > 0$ and $b, \theta > 0$). Because the second order condition of equation (4) is always positive ($b > 0$) it implies a ‘minimum’. Thus, only when the buyer decides to purchase $x^*$ such that $x^* > 0$ (or $Q^* > Q_A$) will she be able to minimize her error costs. Equation (5) implies not only that $Q^* > Q_A$ but also that $Q_A < Q^* < Q_C$. To show that we need to derive $Q_A$ and $Q_C$ by solving equations (1) and (2) for $P_0$. This yields: $Q_A = \frac{(a_2 - P_0)}{b}$; $Q_C = \frac{(a_1 - P_0)}{b}$; $Q_C - Q_A = \frac{(a_1 - a_2)}{b}$. Because the quantity $x^*$ chosen by the buyer (see equation (5)) is equals the expression in (1.2) (which stands for $Q_C - Q_A$) times the probability of error, $\theta$, and because $0 < \theta < 1$, it follows that $Q_A < Q^* < Q_C$.

---

244 Klieger, supra note 28, at 795.
II. PROOF OF COROLLARY 1

Corollary 1: From proposition 1 and equation (6) it follows that the expected error, $E(e)$, is always positive and is unambiguously smaller than the extreme cases where the consumer purchases $Q=Q_A$ or $Q=Q_C$. That is $0<E(e^{Q_A})<E(e^{Q_C})=E(e^{Q_c})$.

I derive equation (6) by substituting $x^*$ in equation (5) for $x$ in equation (4). Equation (6) is the buyer’s demand for information. Because $b>0$ and $0<\theta<1$ it follows that the expected error function (and thus the demand for information) is always positive. Moreover, it is possible to prove that the expected cost function is at maximum when $Q^*=Q_A$ or $Q_C$. This is shown by substituting the values for $x$ the yields $Q=Q_A$ ($x=0$) and $Q=Q_C$ ($x=Q_C-Q_A=(a_1-a_2)/b$) in equation 4, which yields in turn the following expressions: $E(Q_A)=\theta(a_1-a_2)^2/2b$; and $E(Q_C)=(1-\theta)(a_1-a_2)^2/2b$. The two latter expressions are equal and at maximum where $\theta=1/2$ respectively. Because $0<\theta<1$ it also follows that $0<\theta(1-\theta)(a_1-a_2)^2/2b<\theta(a_1-a_2)^2/2b$, $(1-\theta)(a_1-a_2)^2/2b<1$ and thus the expected error will always be smaller than $E(e^{Q_A})$ or $E(e^{Q_C})$. That is: $0<E(e^{Q_A})<E(e^{Q_B})=E(e^{Q_C})$.

III. PROOF OF PROPOSITION 2

Proposition 2: The higher is the difference in quality $d|a_1-a_2|$ (the larger is the error span), the higher will be the maximal error the consumer incurs.

This proof is straightforward. Because $a_1-a_2\geq 1$ (I measure the difference in quality in natural numbers), then the bigger is the value of $(a_1-a_2)$ the higher is the error cost in equation (4).

IV. PROOF OF PROPOSITIONS 3

Proposition 3: The stronger the consumer’s subjective belief that the product is of high quality ($\theta>1/2$) the higher will be the number of units purchased by the buyer.

The proof of proposition 3 is achieved by differentiating equation (5) with respect to $\theta$, which yields the positive expression $(a_1-a_2)/b>0$. 