Famous Trademarks and the Rational Basis for Protecting "Irrational Beliefs"

Shahar J. Dilbary
Shahar.Dilbary@chicagounbound.edu

Follow this and additional works at: https://chicagounbound.uchicago.edu/law_and_economics

Part of the Law Commons

Recommended Citation
Famous Trademarks and the Rational Basis for Protecting “Irrational Beliefs”

Shahar J. Dilbary

THE LAW SCHOOL
THE UNIVERSITY OF CHICAGO

March 2006

This paper can be downloaded without charge at:
and at the Social Science Research Network Electronic Paper Collection:
http://ssrn.com/abstract_id=890632
Abstract

This Article challenges the common wisdom about the desirability of celebrated trademarks. Contrary to the traditional view, it argues that mega-brands are neither economic evils nor is their function limited to imparting information regarding the physical product they flaunt. The Article also rejects the view that famous marks persuade consumers (often referred to as “Snobs”) to “irrationally” pay more for the same physical product they could have purchased for less. Rather, it argues that in purchasing a branded good the consumer is actually purchasing three tied products in one package: a physical product, information about the physical product, and an intangible product such as fame, prestige, peace of mind or a pleasant feeling. Contrary to prior literature, this Article argues that the intangible product benefits both producers and consumers. It explores the demand for the intangible product, its impact on pricing, welfare and consumers’ and producers’ strategies. It argues that under certain conditions one may witness the anomaly of an increase in both price and output, but that such observation does not mandate the conclusion that consumers are facing an up-sloping demand curve as discussed in the literature of conspicuous goods. Instead, the Article proposes that this phenomenon may occur in the traditional down-sloping demand curves and that it is not limited to goods with conspicuous properties. The Article has normative and descriptive implications with regard to three distinct bodies of law: price discrimination, trademark anti-dilution and trade-name law. A direct result 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. The Article also offers a new rational basis for one of the most nebulous doctrines in trademark law: anti-dilution. Anti-dilution law provides special protection to famous marks which is not available to regular ones, and has been unanimously en-throned as one which protects only producers but is injurious to consumers. Conversely, this Article argues that anti-dilution law inures to the benefit of both consumers and producers. It attempts to clear the constitutional concerns that have been raised with regard to the doctrine and explains the fame requirement. The article concludes that 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; Doctorate Candidate (J.S.D) University of Chicago; LL.M. University of Chicago; J.D. Bar-Ilan University; B.A. in Economics Bar-Ilan University. I would like to thank William Landes, Lisa Bernstein, Bernard Harcourt, Ariel Porat, Gil Sadka, Neta Gottlieb, Abby Moncrieff and the participants of the Legal Scholarship Workshop at the University of Chicago and the Intellectual Property Workshop at the Hebrew University. All mistakes are my own.
# TABLE OF CONTENTS

I. INTRODUCTION ......................................................................................................................................... 2

II. THE APPROACHES TO PERSUASIVE BRANDING ................................................................................. 4
   A. THE “HARD LINERS”: BRAND IN A “BAD” .......................................................................................... 5
   B. THE “SOFT LINERS”: BRAND IS INFORMATION ............................................................................... 7
   C. THE “MIDDLE-LINERS”: A RATIONAL CHOICE APPROACH ................................................................ 8

III. TRADEMARK & TRADE-NAME LAWS: PROTECTING SNOBS ............................................................... 9

IV. RE-EVALUATING THE ROLE OF PERSUASIVE BRANDING .......................................................... 13
   A. LOOKING BEYOND THE TANGIBLE PRODUCT .................................................................................. 13
   B. ANTI-DILUTION ................................................................................................................................. 20
      (i). Trademark Infringement and Dilution ........................................................................................... 20
      (ii). Anti-Dilution Law Protects the Persuasive Value of Famous Trademarks .................................. 21
      (iii). The Rational Basis for Anti-Dilution’s Protection of Famous Marks .......................................... 22
      (iv). A New Rational Basis ............................................................................................................... 24
   C. PRICE DISCRIMINATION .................................................................................................................... 26
      (i). “Like Grade and Quality” ............................................................................................................. 26
      (ii). “Commodity”, Famous Brands and the Tangibility Requirement ............................................. 31
      (iii). A Practical Note ....................................................................................................................... 33

V. THE MODEL—A FORMAL APPROACH .......................................................................................... 34
   A. THE BASIC MODEL .......................................................................................................................... 34
      (i). The Consumer Strategy ................................................................................................................. 36
      (ii). The Producer’s Strategy ............................................................................................................. 40
   B. EXTENDING THE MODEL: PERSUASIVE BRAND ......................................................................... 42
   C. DISAGGREGATING INFORMATIVE BRANDING FROM PERSUASIVE ............................................. 48

VI. CONCLUSION ........................................................................................................................................ 49
I. 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

“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.” – Judge L. Hand in Benton Announcements, Inc. v. FTC

“The 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 FTC v. Algoma Lumber Co.

This article seeks to answer two basic questions: First, why are some consumers (often referred to as Snobs) willing to pay more for a product which is often available for much less simply because it bears a famous trademark? And second should the law protect Snobs in their preferences? The law’s answer to the first question is that Snobs are irrational because celebrated trademarks and persuasive advertising play upon their susceptibilities. 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.” At the same time, however, the law protects these irrational preferences and thus enables sellers of branded products to charge higher prices than those charged for identical non-branded goods. The law does so by securing 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. It thus maintains the very magnetism which distinguish them from generic products. Trade-name law achieves the same by prohibiting sellers

---

2 Benton Announcements, Inc. v. FTC, 130 F.2d 254, 255 (2d Cir., 1942).
4 In using the term “Snob” I do not wish to take any moral stand but rather 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 provide (directly) information about the physical product it goads. See also infra notes 15, 17-19 and accompanying text.
7 Note that protecting famous marks is, in fact, protecting Snobbism. The law protects both as is evident from the excerpts above. See also Eastern Wine Corp. v. Winslow-Warren, Ltd., 137 F.2d 955, 958 (2d Cir., 1943) (“There appears to be a related judicial policy of protecting snobbism”).
from using misdescriptive terms to inform consumers that physically identical products which are branded differently are in fact the same. This paradoxical approach—the law’s protection of consumers’ “irrationality” and 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 since “protecting” capricious decisions, on its face, injures the very consuming public whose welfare the law seeks to promote.

This article offers an economic rationale for the law’s protection of famous marks. It starts by challenging the assumption that consumers’ willingness to pay for branded product 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” rather than a “bad” and that the consumers’ seemingly caprice-driven decisions are, in fact, rational and welfare maximizing. More specifically, the article is based on the recognition that when purchasing a branded good the consumer receives three products in one package: a physical product (e.g., a watch, a car or a pocketbook), information with regard to the physical product (e.g., it is a product worth buying, it is made of certain materials, at a certain locality etc) and an intangible product such as fame, prestige, peace of mind or a pleasant feeling.

Part II discusses the three most common approaches to branding and the intangible product that it creates: the “hard liners” who believe that consumers are irrational and branding is a waste; the “soft-liners” who value branding only to the extent that it provides information with regard to the product’s physical qualities; and the “middle-liners” who recognize the psychological effect of branding. Part III 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 IV 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 has a social value. It then explores the normative and positive implications of this explanation on the laws of trademark anti-dilution and price discrimi-
nation. Anti-dilution has been enthroned as a theory that “has proven wholly resistant to analysis”\(^{11}\) and one that is injurious to consumers. Conversely, this article argues that anti-dilution law inures to the benefit of both consumers and producers. For the producer, it is forward looking: it protects the ability of the mark to generate future sales. For the consumer, it is backward looking: it protects her pre-purchase expectations and the value of the intangible product she purchased. Because when a consumer buys a branded product she purchases a physical product (a Gucci bag) on which an intangible asset piggybacks (a pleasant association or prestige) but receives to her possession only the physical product, dilution imposes an externality. A third party may cause the consumer an injury if he tarnishes the pleasant aura for which the consumer paid.

Part IV also offers a new interpretation for the Robinson Patman Act in order to square price discrimination law – whose goal is 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. It argues that persuasive branding 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 fame and status. Another conclusion is that physically identical articles may carry different intangible freights. This explains why the law should allow a producer to brand physically identical products under different marks and charge different prices without being suspected of engaging in a discriminatory activity or subject to an antitrust inquiry.

Part V constructs a formal model which breaks down the demand for a branded product into the three components. Unlike the literature on advertising, the article does not assume that branding “gives favorable notice to other goods.”\(^{12}\) In this respect, it also deviates from the signaling models which argue that the role of branding is limited to imparting information about the physical product that advertisements endorse.\(^{13}\) Instead, it claims that branding creates a new intangible good that must piggyback on the physical one. The model further explains why branding occurs in a market with incomplete information as well as in a perfectly competitive market. It also differs from the prior literature by providing a theoretical framework that takes into account both the informational and persuasive value of branding. Part VI offers concluding remarks.

II. 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 the ever-growing advertising outlays and have tried to measure their impact on consumption, culture and welfare. Many have reached the conclusion that branding’s sole purpose is to serve one master:


\(^{12}\) Becker and Murphy, *supra* note 10 at 942, 945. Becker and Murphy argue that advertisements raise the demand for physical goods. This paper adopts the view that they create a new intangible product.

\(^{13}\) This approach is mainly attributed to Phillip Nelson. See *infra* notes 25 and accompanying text.
the producer and that it is nothing more than a drain on the economy.\textsuperscript{14} Why do producers invest so much money in advertising containing very little or no (direct) information? Is branding desirable? This section 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\textsuperscript{15} to change consumers’ preferences\textsuperscript{16}, increase barriers to entry\textsuperscript{17} and promote artificial product differentiation.\textsuperscript{18} Brands and brand loyalty are said to leads to the creation of monopolies and enable manufacturers to command supra-competitive prices and insulate themselves from the chills and fevers of competition.\textsuperscript{19} Some maintain that persuasive advertising is even immoral and that it enhances another social ill: materialism. Most notably, however, proponents of this school of thought perceive the consumer as irrational and infinitely gullible.  

\textsuperscript{14} In the year 2003 alone the top 100 international marketers have increased advertising expenditures by 11.6\% culminating in a total of $82.83 billion (comparing to a 7.1\% growth in 2002 and a 2.6\% decline in 2001). Of these 100 marketers, 25 spent more than $1 billion on advertising. U.S. based firms (defined by headquarter location) accounted for $40.36 billion. Spending by the top 200 mega-brands accounted for $41.4 billion of the $128.4 billion domestic advertising spending. In 2001 and 2002, advertising-to-sale ratios of over 10\% have been found in the following industries: beverages, perfume and cosmetics, liquors, dolls and stuffed toys, motion pictures, and games and toys. Even in research-based industries (such as pharmaceuticals) promotion outlays can be two to four times larger than the budget for R&D. See M. Hurwitz and R. Caves, \textit{Persuasion or Information? Promotion and the Shares of Brand Name and Generic Pharmaceuticals}, Journal of Law and Economics, Vol. 3 (1988), 299-320.

\textsuperscript{15} H. Simons, \textit{Economic Policy for a Free Society} (1948); Galbraith, \textit{The New Industrial State} (1967); R. Pitofsky, \textit{Changing Focus in the Regulation of Advertising} (published in Yale Brozen, \textit{Advertising and Society} (1974) at 125-147 (hereinafter “Brozen”) (arguing at p. 126: that “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”); N. Economides, \textit{Trademarks} (New Palgrave Dictionary of Economics and the Law); J. K. Galbraith, \textit{The Affluent Society} (1998) at 125-130; R. H. Frank, \textit{Luxury Fever: Money and Happiness in an Era of Excess} (1999) at 5, 11-12, 44 (“luxury goods... cost real resources to produce, resources that we could have put to other uses”).

\textsuperscript{16} Bain J., \textit{Barriers to New Competition, Their Character and Consequences in Manufacturing Industries} (1956); Galbraith (1998) \textit{supra} note 15, at 125-130; Narayan et al, \textit{The Informative versus Persuasive Role of Marketing Communication in New Product Categories: An Application to the prescription Antihistamines Market} (unpublished manuscript, University of Chicago, 2002) at p.11 (defining persuasive advertising as “marketing activities and events [that] enter the physician utility function directly and change her tastes”).

\textsuperscript{17} Bain (1956), \textit{supra} note 16, at 227; Hurwitz and Caves (1988), \textit{supra} note 14, at 300.

\textsuperscript{18} Becker and Murphy, \textit{supra} note 10 start their paper by noting that “most economists and other intellectuals have not liked advertisements that provide little information. Noninformative advertising is claimed to create ants [to which the authors agree] and to change and distort tastes”.

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:

“Buyer preferences for certain products are developed and 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 [emphasis added].”

Luxury goods and real goods, they argue, satisfy two different needs. First in time and importance are the “real” needs. These lead to the production of more food for the hungry, more clothing for the cold and more 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 psychologically grounded. This approach has found a strong foothold among legal scholars. Professor Brown, for example, analogizes branding to a

---

20 Bain, Industrial Organization (Second Ed., 1968), p.227. See also Chamberlain, The Theory of Monopolistic Competition (Eighth ed., 1962), p.119 (arguing that “selling 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 p.133. See also M. McLuhan, Ads: Keeping Upset with the Joneses (published in J. Wright and J. Mertes, Advertising’s Role in Society (1974) (hereinafter “W&M”) at p. 6) (“ads are quite in accord with the procedure of brain washing… They are intended as subliminal pills for the subconscious in order to exercise an hypnotic spell.”).


22 See also H. G, Johnson, Apologia for Ad Men (published in W&M at p. 242-243) (“increasing wealth means the capacity to satisfy wants of a decreasingly urgent kind – wants of a psychological and sociological origin, rather than wants originating in biological needs for food, clothing and shelter”). As Galbraith (1998) notes: 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.”

black art whose goal is to sell illusions to the irrational consumer. He concludes that “the resources, measured in billions, going into persuasive advertising, result only in a curtailed output of real goods.”24 Under his view the law should protect only informative advertising and reject anti-dilution laws, which he deems “the clear most candid and far reaching claim on behalf of persuasive values.”25

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 attribute and quality.26 They explain that if a consumer has had a bad experience with a product, then an advertisement or a trademark will revive in her memory the bad experience she had and would consequently lead to a decrease in consumption.27 The result is that only sellers with good product will find it profitable to brand them. Under this view branding serve as a screening mechanisms the signal to consumers which products are good and which are faulty. The soft-liners, however,

24 Brown, supra note 23, at 1179, 1165, 1169 (“The demand for 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 p. 1183. To the extent advertising provides consumers with information it has a social utility. Thus, “in a pure economy [full information], advertising… would only add to the costs, and decrease the profit, of any firm”. Id at p. 1169-71.

25 Id at p. 1183. Of this critical view is also Klieger, supra note 23, whose article has been recently cited by the Supreme Court in Moseley v. V-Secret Catalogue, Inc. 537 U.S. 418 (2003) (the Supreme Court relied on Klieger’s article in raising questions as to the applicability of dilution by tarnishment. Klieger, at p.857 accuses dilution of protecting persuasive values and artificial product differentiation that are “built primarily on a non-rational or emotional basis.” See also Callmann, Callmann on Unfair Competition, Trademarks and Monopolies at 7:29 p. 7-151 (“Although the independent value of the well known trademark, its function as a means of identifying the article and as a guarantee of qualitative continuity and the economic value because of its irrational appeal were duly noted by the supreme court it is now clear that famous trademark cannot be relied upon to justify a price differential, if the products are not physically different”).

26 See P. Nelson, Information and Consumer Behavior, Journal of Political Economy 78, No. 2 (1970); P. Nelson, Advertising as Information, The Journal of Political Economy, Vol. 82, No. 4 (1974a); P. Nelson, The Economic Value of Advertising, Brozen, supra note 15; P. Nelson (1975) supra note 19. Nelson explained that because there is no theory of taste changes, the approach cannot lead to behavioral predcitions and thus should be dismissed altogether (“I find the hypothesis that advertising changes tastes intellectually unsatisfactory. We economists have no theory of tastes changes, so this approach leads to no behavioral predictions. The intuition of one group of economists is matched against the intuition of other economists with no clear resolution”). Id at p. 219. See also G. Stigler and G. Becker, De Gustibus Non Est Disputandum (matters of taste are not to be disputed), The American Economic Review Vol. 67, No. 2 (Mar, 1977) p. 76-90. But see R. Coase, Advertising and Free Speech, Journal of Legal Studies, Vol. 6, No. 1 (Jan., 1977), 1 at p. 10. After quoting the citation above Professor Coase notes 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”. Only three years after Nelson’s article, Dixit and Norman (D-N), published a paper that developed a controversial framework to analyze changes in taste due to persuasive advertising (Advertising and Welfare, The Bell Journal of Economics, Vol. 9 No. 1 (1978) p. 1-17).

27 The analysis is with regard to products characterized by repeat purchasers and experience qualities (i.e., qualities that consumers learn by experience, such as the taste of canned tuna).
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 the information that the physical product it promotes is a winner. Thus, in utopia, where perfect information is abundant, even they would agree that branding is wasteful.28

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

In between the position of the hard-liners who deplore the effects of persuasive branding and the soft-liners who view it as a means to communicate information about the physical product, is a group that takes an intermediate approach. Members of this faction recognize the informational value of branding but also pays attention to its psychological effects. They argue that advertising adds a new value to the existing physical product. It is, therefore, rational rather than irrational for consumer to consider in making their purchasing decisions. To use Demsetz example, “pork to a religious Muslim hardly offers the same value that it does to a Christian. Nothing is intrinsic about the values of commodities and services. Their worth depends on how we perceive them… Underlying the idea that commodities have intrinsic value is the belief that we are motivated by basic stable and simple wants. If man was ever so motivated, that time has long passed.”29

In 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 paper attempts to do just that. Building on the middle-liners, it wishes to convince the reader that persuasive branding indeed adds value to the physical product. As is shown in the next part, in a modern society even the most basic goods, such as flour, gas, lumber and meat, have in them more than the tangible qualities that the eyes meet or the hands feel. They carry an intangible psychological value which is worth protecting.

28 See also Lillian R. BeVier, Competitor Suits for False Advertising Under Section 43(a) of the Lanham Act: A Puzzle in the Law of Deception, 78 Va. L. Rev. 1 (Feb., 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. In the imperfect real world, though, consumers have imperfect knowledge. The need for information creates the need for advertising”); Brown, supra note 23, at 1170.

29 Demsetz, Advertising in The Affluent Society (published in Brozen, supra note 15, at. 67, 75. As Levitt noted several years earlier, “civilization is a man’s attempt to transcend his ancient animality; and this includes both art and advertising” (T. Levitt, Advertising and its Adversaries (published in W&M, Advertising’s Role in Society (1974) at p. 248); Levitt, The Morality of Advertising, Harvard Business Review (1970)). The Desmetzian theory that commodities are basic building blocks whose value is determined by consumers’ perception was modeled by Stigler and Becker (1977), supra note 26. In their article “De Gustibus Non Est Disputandum” (matters of taste are not to be disputed) the authors propose a new theory of consumers’ choice. Unlike the traditional theory where 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. To illustrate, consider the utility a consumer gets 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 per-se. She gets no utility from the goods themselves. They are used to “manufacture” the game (see: Len M. Nichols, Advertising and Economics Welfare, The American Economic Review, Vol. 75, No. 1 (Mar., 1985) p. 213-218). Unlike Stigler and Becker this article perceives trademarks not as input but rather as containing an intangible end-product, which enters directly to the consumer utility function.
III. TRADEMARK & TRADE-NAME LAWS: PROTECTING SNOBS

Trademark and trade-name laws’ approach to persuasive branding is inconsistent. It suffers from a “hard-line”–“soft-line” schizophrenia. It adopts a “hard-line” premise: explicitly stating that Snobs are irrational and branding exploits their susceptibilities. But instead of fighting what it perceives to be anticompetitive, (as the hard-liners do) it adopts a “soft-line” solution: it protects famous marks and thereby Snobbism thus enables sellers of branded products to charge higher prices than those charged for identical non-branded goods. Indeed, in a series of cases, the Supreme Court has fully embraced the hard-liners’ view that consumers are often irrational in their purchasing decisions. Persuasive branding, held Justice Harlan, may “undeniably… [be] used to create irrational brand preferences and to mislead consumers as to the actual differences between products.”\footnote{30 FTC v. Procter & Gamble Co., 386 U.S. 568, 603 (U.S., 1967).} Its object is “to impregnate the atmosphere of the market with the drawing power of a congenial symbol rather than to communicate information as to quality or price.”\footnote{31 Mishawaka Rubber & Woolen Mfg. Co. v. S. S. Kresge Co., 316 U.S. 203, 205 (1942).} Trademarks were even accused of possessing Pavlovian capabilities, creating a “conditioned reflex” in buyers’ minds.\footnote{32 Chanel, Inc., 402 F.2d at 567.} 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 [emphasis added].”\footnote{33 Id.}

The judicial approach is paradoxical and suffers from schizophrenia because rather than fighting what it believes to be artificial product differentiation, misallocation of resources and social waste, the courts protect consumers’ capricious decisions. They help to maintain consumers’ perception that branded and non-branded products are different.

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 [Armani, Gucci, etc.] . . . , 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.”\footnote{34 Federal Trade Commission v. Royal Milling Co., 288 U.S. 212 (1933).} In Royal Milling Company, the Federal Trade Commission (FTC) found the defendants’ use of the words “Mill” or “Milling” in their trade names to be misleading (in violation of Section 5 of the Federal Trade Commission Act) because they were sellers but not grinders of flour. On appeal, both the Sixth Circuit Court of Appeals and the Supreme Court of the United States acknowledged that the consuming public possessed the “unfounded belief” that flour bought directly from grinders is superior to that sold by the defendants. Yet the opinions
differed in their willingness to protect consumers in their “irrational belief.” Focusing on the product’s physical characteristics, the Court of Appeals dismissed the order. It found that the two types of flour (those made by grinders and those mixed and sold by the defendants) were of the same quality, made under the same process with the same machinery, and were therefore identical. The finding that the products were identical led the Court of Appeals to the conclusion that there was no public injury or financial loss. For the Court of Appeals, the public received exactly what it sought to receive. The fact that the public wanted flour sold directly by grinders believing it is different from flour sold by the defendants was of no consequence. In fact, the public seems to be better off: It has received the same flour at a cheaper price. The Supreme Court reversed. It held that because consumers believed that flour prepared by original grinders is of superior quality, the result of the defendants’ use of the word “Milling” was that consumers were deceived into purchasing an article which they do not wish or intend to buy. It found deception even though the consumer received the same physical product they intended to buy. In so doing, the Supreme Court broadened the law of unfair competition to protect consumers not only against deception with regard to the product’s physical attributes, but also from deceit with regard to the product’s psychological value. It protected consumers’ perception, even if emotionally-based, irrational or unfounded.

Less than a year after the Royal Milling holding, a similar case arrived before the Supreme Court. This time it was the holding of the Ninth Circuit Court of Appeals that was dismissed on the same grounds. In Algoma Lumber, the FTC issued a cease and desist order against lumber suppliers who marketed lumber as “California White Pine” although it was biologically “Yellow Pine.” While aware of the Royal Milling holding, the Court of Appeals annulled the order explaining that the two types of woods were so nearly equal in utility that buyers were not injured, even though misled. 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.” In such matters, the Court noted, “the public is entitled to get what it chooses, though the choice may be dictated by caprice or by fashion or perhaps by ignorance.”

36 Id. (“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”).
37 Algoma Lumber Co., 291 U.S. 78.
38 If one needed a reassurance that the law of trademark and unfair competition recognize the psychological effect branding may have on consumers, such a proof was provided by Judge Frankfurter in Mishawaka Rubber & Woolen Mfg. Co., 316 U.S. at 205 (“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 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”).
By 1942, the Courts of Appeals finally learned to apply the Supreme Court policy. In *Benton Announcements, Inc.* 39 the FTC ordered the petitioner, Benton, to cease using the word “engraved” to describe its stationery. On appeal, the court found that the process used by Benton was much cheaper than ordinary engraving and that few people other than experts in the craft 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.*” 40 Similarly, in *Kerran v. FTC* 41 the Tenth Circuit Court of Appeals affirmed the Commission’s order requiring sellers of recycled oil collected at gasoline stations to stop marketing it without disclosing that it was refined from previously used oil. Despite the finding that re-refined oil is absolutely identical to oil that is refined directly from virgin crude oil both in chemical structure and quality, the court held that because consumers prefer new to used oil (why?), 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.” 42

Why consumers should be protected in their “irrational” beliefs the court did not say. Nor did it find that consumers would be better off if protected in their snobbery. The opposite is true. Courts have emphasized that persuasive branding fosters the differentiation of physically identical products by creating a whimsical aura that enables producers to command higher prices than they would have been able to command had they faced the full burden of competition. 43 Consumers are, on its face, worse off because they pay more for the same identical product they could have purchased for much less. If instead of protecting consumers’ “irrational beliefs” the court would impose on them the same item, 44

---

40 Id at p. 255.
42 See also *FTC v. Colgate-Palmolive Co.*, 380 U. S. 374, 389 (1965) (“We find an especially strong similarity between the present case and those cases in which a seller induces the public to purchase an arguably good product by misrepresenting his line of business, by concealing the fact that the product is reprocessed, or by misappropriating another’s trademark. *In each 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. Yet, a misrepresentation has been used to break the habit and, as was stated in Algoma Lumber, a misrepresentation for such an end is not permitted*” [emphasis added]).
43 See for example *Algoma Lumber Co. v. FTC*, 64 F. 2d 618 (9th Cir., 1933); *Chanel, Inc.*, 402 F.2d at 567 (“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. To the extent that advertising of this type succeeds, it is suggested, the trademark is endowed with sales appeal independent of the quality or price of the product to which it is attached; 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… In some markets this barrier to entry may be insuperable”).
44 For example, by allowing sellers to use certain misdescriptive terms in their trade-name (e.g., “Mill” for a seller who is not a grinder) or by compelling certain sellers to license the right to use a mark.
consumers would be able to purchase the same physical flour, lumber, engravings or gas at a lower price.

A different approach was taken by Judge Frank of the Second Circuit Court of Appeals.\textsuperscript{45} Judge Frank agreed with the Supreme Court’s view that Snobbery should be protected. However, unlike the latter, he explained that the purpose is NOT to protect consumers, but quite the opposite. Judge Frank concluded that the sole purpose of trade-name law is to protect producers against those who wish to free ride on their goodwill. Under his view, although consumers are undoubtedly worse-off, an overall cost-to-consumers–benefit-to-producers analysis mandates that the latter be given protection: \textsuperscript{46}

“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 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 [emphasis added].”\textsuperscript{47}

Judge Frank’s conclusion was simple: the reason for judicially safeguarding trade-names is to protect producers so that they can reap what they have sown. This property-patent rationale, however, is in direct contrast with the long-standing view that the essence of both trademark infringement and unfair competition is to avoid consumer confusion and that “protection of trademark is merely a facet of consumer protection.”\textsuperscript{48} 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 a desire to protect a senior competitor from a junior that free-rides on a senior’s developed name, it does not explain why the Supreme Court did not allow producers to use

\textsuperscript{45} See Eastern Wine Corp. v. Winslow-Warren, Ltd., 137 F.2d 955 (2d Cir., 1943) and Standard Brands, Inc. v. Smidler, 151 F.2d 34 (2d Cir., 1945).

\textsuperscript{46} Judge Frank noted that while courts have adopted Adam Smith’s view that the economic well-being of consumers is the paramount goal of any economic activity “legal principles do not dwell a la Robinson Crusoe or in an anarchic state of nature.” Id at p. 958. He explained that the law often creates immunities from competition by creating and enforcing monopolies. Trade-name law, to Judge Frank, is one such type of monopoly to protect producers, not consumers.

\textsuperscript{47} Id at 40-41.

names that are in the public domain. The words “Milling” in Royal Milling, “White Pine” in Algoma Lumber and “Engraved” in Benton were all generic names—permanent residents of the public domain. Had the Supreme Court allowed sellers of flour to use the word “Milling” in their trade name, or sellers of lumbers to use the generic name “White Pine,” no competitor would have suffered a diminution in his investment. Their marks would serve their traditional function: identifying their source of manufacture.49 Consumers, on the other hand, would have enjoyed a decrease in price and an increase in welfare.

IV. RE-EVALUATING THE ROLE OF PERSUASIVE BRANDING

A. Looking beyond the Tangible Product

This part offers a new economic rationale for protecting Snobs. It challenges the institutions’ approach that consumers are irrational and it argues that Snobbery is a desirable welfare-enhancing phenomenon which inures to the benefit of both consumers and producers. It does so by offering a more complex view of the role of trademarks. Prior formulations of the economic role of trademarks assumed that their role is simply limited to conveying information about the physical product to which they are affixed, thereby reducing consumers’ search costs. 50 Trademarks serve this role by signifying a specific source of manufacture (or sale). Because they denote a constant source, the 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 or remember details regarding the product’s materials, composition, etc. The mark or the trade-name tells her: “I am the one you want.” They also provide her with the assurance that the product’s physical attributes are the same as the physical attributes of her previous purchase (because it is manufactured by the same source).

Viewing trademarks only as a means of communicating information about the product to which they are attached, albeit a viable thesis, is somewhat naïve. Trademarks may, because of the mark’s popularity, become an important attribute of the product itself, just like a color, taste, smell or design. Often, a trademark may even become the product itself. To illustrate, think of the insignia used by the Mercedes-Benz corporation to identify its cars. Over time, the insignia may gain value of its own so that consumers will be willing to don the Mercedes emblem as earrings, key-holders, etc. Such use is a non-trademark use. The mark becomes a good of its own. In its new incarnation, the mark is emancipated from the physical product to which it previously had been subordinated, finally free from the product it once designated.51 This new type of earrings (Mercedes
shaped) 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 become 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 “collective marks”. Nevertheless, the court held that the defendant’s use of the Job’s Daughters name and emblem was not actionable since they were simply functional 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.”

But in between the two types of 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 (e.g., the Mercedes earrings)—lie cases of a third type. In this last type, a trademark retains its functional source but also serves as an independent good. Not only does the mark increase consumers’ welfare by decreasing their informational costs but also it provides them with additional utility independent of its parent product. At least one court, however, was not willing to extend protection in these cases. In Pagliero v. Wallace China, the court engaged in a demand-based analysis. The Pagliero test asks whether the mark enhances demand for the physical product. If it does, then the mark is considered “functional” and as a result is not protected. If, on the other hand, the mark’s impact is limited to imparting information about the goods to which it is affixed, then it is eligible for protection. The test is in the lines of Professor Brown’s proposal to disaggregate the informational “threads” of advertising from the persuasive ones.

This Article rejects the view that imitation should be forbidden only where the mark is “adopted for purposes of identification . . . and hence, unrelated to basic consumer demands in connection with the product.” The Pagliero court’s reliance on a demand test is misplaced. It may well be that a mark, while keeping its “trademark function” as identifier, may nevertheless enhance consumers’ demand. Indeed, it is often

---

53 A collective mark is a trademark “used by the members of a cooperative, an association or other collective group or organization... and includes marks used to indicate membership in a union, an association or other organization. 15 USCS § 1127. See also Opticians Ass’n of America v. Independent Opticians of America, 920 F.2d 187, 193 (3d Cir. 1990) and McCarthy, supra note 48, at §19:34.
54 Pagliero v. Wallace China Co., 198 F.2d 339 (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”, was limited (albeit not explicitly rejected) by subsequent decisions. See for example Vuitton Et Fils S.A. v. J. Young Enterprises, Inc., 644 F.2d 769, 772 (9th Cir. 1981); McCarthy, supra note 48, at §7:80.
55 Pagliero, 198 F.2d at 343. The 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 the consumer’s demand (see Part V). Second, it seems that the doctrine of functionality calls for a supply-based analysis as it is often equated with an increase of producers’ marginal costs (See for example Judge Posner in W. T. Rogers Company v. Wendell Keene, 778 F.2d 334, 339 (1985) holding that “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
the case that an individual would buy a product not only because of the product’s physical attributes but also because of the insignia or the trade-name that identifies the manufacturer of the goods. This combined purpose of the trademark may explain why individuals’ willingness to pay for goods that bear famous marks or trade-names such as “Armani” is much higher than their willingness to pay for goods of identical (or even of higher) quality and grade. The trade-name “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 the “exorbitant prices” demanded by car manufactures such as Ferrari or Lamborghini not only because of the cars’ unique physical properties but also because of the “popularity” of these cars. A Ferrari, unlike an identical vehicle that lacks the Ferrari mark, is able to function as a car while simultaneously signaling the owner’s wealth, luxury 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 product’s owner: the consumer’s taste, beliefs and stature. Moreover, trademarks and persuasive advertising sometimes do not serve any signaling purpose at all. Instead, they are limited to providing a psychological pleasure or private satisfaction. Indeed, consumers are often willing to pay high prices for inconspicuous goods such as Calvin Klein underwear or a L’Oreal body lotion, neither of which is visible to others. They do so because the inconspicuous product creates a pleasant feeling. To use the slogan coined by L’Oreal in its recent advertisement campaign, they buy L’Oreal “because [they’re] worth it.” Similarly, the same product can be both a signal of status and a source of satisfaction. Hanging a Picasso in the living room can be a signal of status for the social person, but what value does it have for the loner who only enjoys the fact of owning such a piece of art if not a private emotional catharsis?!

More specifically, there are three inseparable demands 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 the suit that protects her from the cold, the scent of the perfume and the taste and nutritional value of the salad dressing. The second kind of demand is for intra-brand information about the product’s credence qualities. Was the suit handmade, and is it made from cashmere or wool? Was the perfume produced according to a “secret formula”? How many calo-

\[\text{wanted to come up with a non-oval substitute for a football}^\text{[emphasis added]}.\] Another words, Judge Posner’s rationale is that protecting a functional feature will raise rivals’ costs which in turn would impact supply rather than consumers’ demand.

\[\text{On the distinction between inter-brand and intra-brand activities see also infra note 157.}\]

\[\text{Credence qualities are qualities which can not be verified even post-purchased, such as the effects of vitamins. The economic literature distinguishes between three types of attributes. Experience qualities which can be verified pre-purchase (the color of a tomato), experience quality which can be verified post-purchase (the taste of canned tuna) and credence qualities. See Darby and Karni, Free Competition and the Optimal Amount of Fraud, Journal of Law and Economics, Vol 16., No. 1, p. 67-88 (1973). Nelson (1970), supra note 26.}\]

\[\text{See for example Jacob Siegel Co. v. Federal Trade Commission, 327 U.S. 608 (U.S., 1946); Elliot Knitwear, Inc. v. Federal Trade Commission., 266 F.2d 787 (2nd Cir., 1959).}\]
ries does the salad dressing have per unit? Is it low in carbs? Is the product reliable and likely to perform well in future periods? As shown in Part V below, the information conveyed by the mark leads to the optimal level of consumption of the physical goods and thus increases consumers’ surplus. The third demand is for the image or psychological pleasure associated with the mark’s fame. The consumer enjoys a new product: the intangible aura which surrounds the physical good: that of being wealthy and affluent, spontaneous, “cool” or cosmopolitan. In other words, 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 directly the demand for the product itself and increases sales (formally, this is illustrated by a shift of the demand curve north-east). In terms reminiscent of the Pagliero court, this Article argues that although the mark and the product are “related to basic consumer’s demand in connection with the product,” the mark should nevertheless be protected. And it often is, as shall be demonstrated.

The three demands are commingled. While it is intuitive that consumers seek a “package” containing both the product and the pertinent information regarding 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 answer is simple. Social norms and technological constraints often make it impossible to consume 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.61 One such exception is that of noble titles. Unlike feudal times when titles conferred upon their bearers substantial rights (such as voting rights, rights to land, tax revenues etc), titles today are mainly a matter of status. Sellers of titles promise their clients “instant credibility and personal prestige”62—that they will be “treated like some sort of Royalty or famous film star.”63 Many websites offer for sale titles such as Sir, Lord, Baron, Count, Viscount, Marquis and Duke.64 For the small

---


61 See for example Gertrud M. Fremling and Richard A. Posner, Status Signaling and the Law, With Particular Application to Sexual Harassment, 147 U. Pa. L. Rev. 1069 (1999) (noting that “Status” has been a concern primarily of sociologists, anthropologists, and historians rather than of economists; and though there is a growing economic literature, status is still widely considered a noneconomic 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.” (emphasis added)).

62 http://www.englishtitles.co.uk/.

63 http://www.matthewhenson.com/sorebritishlosers/sorebrits8.htm. Another seller promises that “by acquiring and using a Seated Title [customers] will undoubtedly be treated very differently by the people with whom you come into contact with in all aspects of social and commercial interaction. [They] may expect the best table at a restaurant, the best seats at the theatre and aboard ship - dinner at the Captain's Table. Imagine the difference in the attitude of hotel staff when you check in, not as Mr and Mrs but as Lord and Lady. Likewise in the business world - where [the] Title will give [their owners] instant credibility and personal prestige” (see http://www.english-titles.co.uk/).
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. Even Seated Titles—that is, titles that are accompanied by the name of a locality (e.g., “The Lord of Hyde Park”) and that are said 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).

As noted above, social norms are another independent reason that a physical product must serve as a platform for the intangible psychological freight. Take, for example, the person who wishes to inform the public that she is wealthy. One strategy would be to do so explicitly. But she will suffer the stigma of being presumptuous, rude or arrogant. Moreover, the signal would not be credible. If one could enjoy the social benefits associated with wealth, prestige or refined taste simply by praising oneself, many would do so. Consequently, a pooling equilibrium would occur, and the public would not be able to distinguish those who tell the truth from those who do not. The wealthy consumer (the Snob) can achieve the desired effect, however, by wearing a conspicuous garment that transmits the same message. Burberry’s famous trade dress or a Cartier watch would certainly do the job. Being visible to the public, such garments function not only as timekeepers or attires but they also provide information about their owner. The same message that would be taken as rudeness if conveyed explicitly becomes style when conveyed indirectly. The signal is also credible because only those who are wealthy enough are able to afford to purchase such products. Even in the case of inconspicuous goods, the psychological freight of which is merely a pleasant feeling received from wearing a garment or an invisible cosmetic ointment, 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 enjoy the same level of satisfaction.

Similarly, a work of art may have the same signaling or pleasuring effect. For this very reason, consumers purchase both replicas and the original paintings. The former provides a décor. The latter both provides a décor and creates the image of high socioeconomic status. The different psychological freight carried by a physically identical object 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 the very same physical painting if it were attributed to


65 http://www.englishtitles.co.uk/.

66 It is often the case that the physical platform is necessary for the consumption of the psychological product. Watching a horror movie, visiting an amusement park or even consuming drugs are only few ways to produce an emotional thrill. As long as the current technology and cultural norms cannot make us buy an “emotion” in a pure form, separately from a physical product, such a commingling is a necessity.

67 See for example W. D. Grampp, Pricing the Priceless: Art, Artists and Economics (1989) at p. 36.
an unknown painter. That consumption of intangible psychic goods is not limited to irrational individuals is demonstrated by the fact that even Museums often call attention to the money-value of their artworks. They do so either explicitly or by calling attention to a picture by the way it is exhibited. Grampp notes that one such method is to loop a velvet cord in front of a prized acquisition, as the Metropolitan 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 all physical aspects (indeed, usually the copy made from the same negative is of better quality than the original which 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 1930’s vintage photograph—was sold at Sotheby’s on October 7, 1988 for $244,500. An exhibition quality print could have been obtained at $50 from the Library of Congress Photo-duplication Service. This Article argues that 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 photo. It is only the beholder who is “blind” to the intangible freight.

There are other possible explanations, however, that may account for the consumers’ willingness to pay. I will focus briefly on two. The first explanation is one of supply and demand. Because the supply of the original piece of art or photo is very limited (often to only one unit as in the case of a vintage photo) whereas the supply for copies is very high (copies of a photo can be reproduced at a very low marginal cost) it is only natural, the argument goes, that the price for the original is higher. The second alternative explanation is one of investment: consumers are willing to pay more for the original not because they extract an added value (prestige or satisfaction) but rather because they know that they can sell it to others at the same or even higher price in the future. Both arguments are unsatisfactory. The first argument assumes that the market for the original and the market for its copies are different product markets. But it does not explain why that should be so. After all, the opposite assumption—that the original and its copies are perfect substitutes—is more appealing (since the two products are physically identical). This Article argues that an original is truly different from a copy because the original carries a psychological freight that a copy does not. Similarly, the second explanation—that consumers purchase the original as an investment—is flawed for two main reasons. First, an investment in arts is a poor investment because its price is subject to the volatile and

68 Id. Grampp reports that when the 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. But see Landes and Posner, supra note 50, at 255. I do not believe that the scarcity of the original as oppose to the widespread availability of its copies can explain the price differential. After all, the copies and the original 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.


70 Grampp supra note 67, at 25.
ever-changing trends of fashions and fads. It is also a unique product which can not be easily sold. Other markets are more apt for investing purposes. They offer the same expected rate of return at a much lower risk. The main flaw, however, lies in the statement that one purchases a piece of art as an investment only because others are willing to pay more for it. This statement begs the question: why others are willing to do so? The answer provided by this Article is that there is a substantial number of consumers that are willing to pay a high premium for the intangible value which piggybacks on the original to sustain such a market.

Off-the-counter generic and branded drugs which are identical in chemical structure are another example. Assuming equal therapeutic value and drug quality and although monitored by the Food and Drug Administration (FDA), many consumers nevertheless prefer to pay a higher price for the branded drugs. Surveys show that buying generic drugs could save consumers hundred of million of dollars every year. Why pay more when one can pay less for the same drug? For the hard-liners, this would be a clear proof of the wasteful nature of branding and an evidence of consumers’ irrational behavior. Soft-liners would attack the assumption of therapeutic equivalence. They will argue that branded drugs convey the information that the physical product the mark is affixed to is of better quality and hence commands a higher price. But even they would have to admit that if the assumption of therapeutic equivalence holds (i.e., generic and branded drugs are indeed of the same physical quality) advertising is wasteful. Even under the weaker assumption that generic and branded drugs are not absolutely identical, one would expect the advertising outlays to reach a maximum level where it is able to convey the information that the product it goads is a “winner”. Advertising expenditures, however, seem to be much higher than necessary to achieve this informational goal. This article’s explanation, on the other hand, is that consumers of branded drugs are rational. They buy not only a drug; they also buy a feeling. They purchase Bayer’s Aspirin for the same reason they purchase L’Oreal lipstick: because they “worth it”. They receive their peace of mind not only by taking the pain reliever but also from knowing it was made by Bayer. Moreover, many times a placebo (a tablet that contains no medication) has medical effects due to purely psychological reasons. An advertisement that constantly harps that a drug manufactured by a certain brand will make you stronger, healthier or more active sexually, may well have a better impact than a physically identical drug bearing a different mark, or no mark at all. I now turn to analyze the impact of the model on two distinct bodies of laws: Trademark anti-dilution and price discrimination.

71 See William O. Bearden and J. Barry Mason, Determinants of Physician and Pharmacist Support of Generic Drugs, The Journal of Consumer Research, Vol. 7 No. 2 (1980) p. 121-130. The authors argue that there may be real differences between generic drugs and their brand name equivalents. They note that 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”. Also, some surveys have suggested that the FDA is less efficient in monitoring small firms, which are the ones most likely to produce drugs (see Fisher David, Genetic Chaos, Hospital Practice Vol. 13, p. 13-18).

72 Bearden and Mason, supra note 95, cite the Department of Health Education and Welfare (HEW) report which notes that the use of generic drugs could easily save consumers in excess of $400 millions annually and particularly benefit the elderly.

73 See for example Hurwitz and Caves, supra note 14, reporting that in the drug industry where R&D expenditure are relatively high, promotion budget can be twice to four times larger than the R&D budget.
B. Anti-Dilution

(i). Trademark Infringement and Dilution

Trademark dilution is not only a newcomer to the federal arena, it is also an exception to the general rule. The gist of trademark analysis is the finding of consumers’ confusion. Traditional trademark infringement occurs when one producer palms off his product as another’s. The law protects the public so that it will be confident that in purchasing a product bearing a particular trademark it will get the product which it asks for; it protects the producer from a diversion of trade on non-meritorious grounds. Although trademark law is designed to protect both consumers and producers, the private cause of action is only available to competitors. The law allows those “parties with the greatest interest in enforcement, and in many situations with the greatest resources to devote to a lawsuit, to enforce the statute rigorously” and be the avengers of the public.

Trademark dilution, on the other hand, has been the subject of a constant controversy since its introduction to American Jurisprudence in 1927 by Professor Schechter. “Dauntingly elusive”, “amorphous concept” and “a theory that no one understands” are just few of the epithets used to describe it. Generally speaking, dilution may wear two forms: blurring and tarnishment. Blurring is the whittling away of a trademark’s uniqueness. It occurs when other sellers, not necessarily of identical goods, use or modify

---

75 The Senate Committee on Patents, S. Rep. No. 1333, 79th Cong., 2d Sess., 3 (1946), U.S.C.C.A.N. 1274 (stating that “[t]he purpose underlying any trademark statute is twofold. One is to protect the public so that it may be confident that, in purchasing a product bearing a particular trademark which it favorably knows, it will get the product which it asks for and wants to get. Secondly, where the owner of a trademark 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. This is the well-established rule of law protecting both the public and the trademark owner” (emphasis added)); See also General Baking Co. v. Groman, 3 F.2d 891 (C.C.A 1st Cit. 1925).
76 Coca-Cola Co. v. Procter & Gamble Co., 822 F.2d 28 (6th Cir. 1987).
77 General Baking Co. v. Groman, 3 F.2d 891 (C.C.A 1st Cit. 1925).
81 Moskin, supra note 11, at 125.
the plaintiff’s trademark to identify their own goods.\(^{83}\) Using the famous mark “Rolls-Royce” for computers or “Tiffany” for shoes are few examples. In these cases there is no concern that the public will be confused. There is no passing off (consumer are not likely to think the renowned car manufacturer is affiliated with the sale of the computer) nor is there a threat that the use of the mark by the computer manufacturer would divert trade away from Rolls-Royce. Rather, such a use will lessen the power of the mark to identify a unique seller (the words “Rolls-Royce” would trigger an association of a car and a computer). 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 that is likely to evoke unflattering thoughts about the owner’s product. It replaces a positive association by a negative one. Tarnishment claims typically arises in cases where a mark is depicted in a context of sexual\(^{84}\) or illegal activity\(^{85}\) or where the defendant pokes fun at another’s mark.\(^{86}\) For example, in Chemical Corp. of America v. Anheuser-Busch the court enjoined the seller of a floor wax containing insecticide from using the slogan “Where there’s life there’s Bugs”—a close version of which the plaintiff used in marketing its Budweiser beer (“Where there’s life there’s Bud”)—finding such use to be tarnishing.\(^{87}\)

(ii). Anti-Dilution Law Protects the Persuasive Value of Famous Trademarks

Anti-dilution theory undeniably protects the very function of branding that has elicited hostile reactions from both economists and jurists: that of persuasiveness. Professor Brown notes that dilution is “the clear most candid and far reaching claim on behalf of persuasive values” and concludes that as such it should be divorced from the protection of the law.\(^{88}\) Similarly, in Augusta National the court analogized dilution to “a cancer which, if allowed to spread, will inevitably destroy the [persuasive] advertising value of the mark” causing the erosion of its “magic”.\(^{89}\) Another commentator concluded that anti-dilution laws preserve the “non-rational associations the shovel maker had succeeded in building up”.\(^{90}\) More recently, in a critical article Professor Welkowitz warns that dilution “can create artificial barriers to entry into the marketplace by fostering brand loyalty at

\(^{83}\) Hormel Foods Corp. v. Jim Henson Prods., 73 F. 3d 497 (2nd Cir., 1996) (“Dilution by blurring occurs when customers or prospective customers see the plaintiff's mark used on a plethora of different goods and services”).


\(^{85}\) The Coca-Cola Company v. Gemini Rising Inc., 346 F. Supp. 1183(1972) (enjoining the sale of posters reading “enjoy cocaine” that consisted of the soft drink manufacturer’s “Coca-Cola” mark).


\(^{87}\) Chemical Corp. of America v. Anheuser-Busch, Inc., 306 F.2d 433(5th Cir., 1962).

\(^{88}\) Id at p. 1191, 1205.

\(^{89}\) Augusta National, Inc. v. The Northwestern Mutual Life Insurance Company, 193 U.S.P.Q. (BNA) 210 (D.S.D.G., 1976) (“Dilution is an act which threatens two separable but related components of advertising value. Junior uses may blur a mark’s product identification or they may tarnish the affirmative associations a mark... convey(s)”).

\(^{90}\) Comment, Dilution: Trademark Infringement or Will-O’-The-Wisp?, 77 Harvard Law Review 520, 54 TMR 184 (1964) (hereinafter “Comment on Dilution”) at p.522.
the expense of thoughtful decision making”. Of this critical view is also Klieger. Klieger observes that trademarks serve as a vessel through which both forms of advertising (informative and persuasive) must pass. The latter, he argues, is “aimed at the consumer’s heart rather than mind”. Rather than convey to consumers information regarding the “physical elements or attributes”, it seeks to create an intangible aura. He concludes that “where product differentiation results from differences in the product’s tangible characteristics… informed consumers rationally pay the premium. But where product differentiation is built primarily on a nonrational 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 only protect the persuasive function of trademarks, he urges that they should be abandoned altogether.

(iii). The Rational Basis for Anti-Dilution’s Protection of Famous Marks

Why did Congress provide protection to the very doctrine that only protects the persuasive function of branding which courts and commentators deem to be anticompetitive and detrimental? To date, no clear explanation exists. The prevalent view is that anti-dilution laws 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 protecting the trademark owner against encroachment on its newly established property right in gross; the protection of the mark’s owner against the misappropriation of his investment in advertising; the trespass upon the owner’s property; an “unauthorized taking”; the impediment of the trademark’s owner ability to expand his trade to other lines or fields of enterprise; the protection of the owner against confusing uses; the protection of the trademark’s owner from uses that may render his

---

92 As an example, Klieger, supra note 23, cites a survey which found that consumers associate the trade dress of a Coca-Cola bottle with feelings such as ultimate enjoyment, uniqueness and universal unity. He deprecates that although competitors can deliver a similar physical product—one of equal if not a better taste than that of Coca-Cola—they cannot match the latter’s associations without wasting resources on persuasive advertising.
93 The elusive nature of the doctrine was recently discussed by Moskin, supra note 11, at 122, who enthroned it as “a phenomenon that cannot be seen, measured or otherwise perceived or detected” and one that “has proven wholly resistant to analysis”.
94 Deere & Co. v. MTD Prods., Inc., 41 F.3d 39 (2nd Cir., 1994).
96 Tiffany & Co. v. Tiffany Productions, Inc., 264 N.Y.S. 459 (1932); Stork Restaurant v. Sahati, 166 F.2d 348, 357, 76 U.S.P.Q. 374 (9th Cir. 1948); Chemical Corp. of America v. Anheuser-Busch, Inc., 306 F.2d 433(5th Cir., 1962); Welkowitz, supra note 91, 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. Perryman, 306 F.2d 509 (7th Cir.,2002) (Judge Posner doubts the misappropriation rationale).
97 Welkowitz, supra note 91, at 534; Moskin, supra note 11, at 132.
98 Moskin, supra note 11, at 131.
99 Schechter, supra note 78.
100 Comment on Dilution, supra note 90, at 523, 531.
mark generic,\textsuperscript{101} protection against the theft of the image and prestige the trademark owner has created,\textsuperscript{102} and protection against cheap copies.\textsuperscript{103}

As opposed to the colossal controversy with regard to the rationales underlying the dilution doctrine and its applicability, there exists a universal consensus that the aim of anti-dilution law is to protect the owner of the mark rather than consumers,\textsuperscript{104} and that it is a departure from the consumer-protection basis to a “radical business-friendly” regime.\textsuperscript{105} In its most recent decision, the Supreme Court in Moseley v. V-Secret has noted that “unlike traditional infringement law, the prohibitions against trademark dilution… are not motivated by an interest in protecting consumers”. This article challenges these statements.

Christening anti-dilution statutes as creating a sort of an exclusive property right that inures only to the benefit of producers has also raised questions as to the constitutionality of the Federal Trademark Dilution Act (FTDA). The main concern lies in Congress’ authority. Congress can grant an exclusive intellectual property right only under the Patent-Copyright Clause.\textsuperscript{106} This clause requires that an exclusive property right be given only to original “writings and discoveries” and even then it must be given for a “limited time” only.\textsuperscript{107} Because trademarks are neither,\textsuperscript{108} in enacting the Trademark Act, Congress had to rely on the less powerful Commerce Clause.\textsuperscript{109} But as Jacob notes,\textsuperscript{110} in so doing Congress cannot escape the limitations of the Patent-Copyright clause or the requirement of the latter would be meaningless. Put differently, a right granted under the Commerce clause cannot be exclusive and permanent. Thus, if anti-dilution theory elevates a right in

\textsuperscript{101} Welkowitz, supra note 91, at 548; Comment on Dilution, supra note 90, at 523, 531; Moskin, supra note 11, at 124, 128, 149; Callmann, supra note 25, §22:13 at 22-132, 138, §2:14 at 22-237. But see: Judge Posner in Ty Inc., v. Perryman, 306 F.2d 509 (7th Cir., 2002), rejecting the genericism rationale.


\textsuperscript{103} Landes and Posner, supra note 50, at 209.


\textsuperscript{105} Klieger, supra note 23, at 806.

\textsuperscript{106} 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.” Art. I, § 8, cl. 8 (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.” Art. I, § 8, cl. 3.

\textsuperscript{107} See Welkowitz, supra note 91, at 532.

\textsuperscript{108} A right in a mark can potentially last forever. Also, the Supreme Court has held that trademarks are not original “writing” (The Trade-Mark Cases, 100 U.S. 82, 93 (1879)).


\textsuperscript{110} Brian A. Jacobs, Trademark Dilution on the Constitutional Edge, 104 Colum. L. Rev. 161(2004).
a mark to the level of an exclusive property right—as is often argued—it may be found unconstitutional.

Another problem which surrounds the nebulous dilution doctrine is the “fame” requirement. Under the FTDA, only “famous” marks can enjoy anti-dilution protection. Many have criticized this requirement for being too strict, “troublesome” or one which should be eliminated altogether. Its detractors argue that stronger marks are better able to withstand diluting effects. It is the weaker or newer marks, they argue, which are more likely to suffer from imitation of their brands’ name. They therefore conclude that the theory should be extended to protect unknown trademarks.

(iv). A New Rational Basis

The analysis pressed in this article, on the other hand, leads to the conclusion that anti-dilution laws inure to the benefits of both producers and consumers. These laws 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. Thus, the article clears the constitutional concerns that have been raised with regard to the doctrine. It also explains the fame requirement. More specifically, this article argues that when the consumer purchases a good bearing a famous mark she receives three products: a physical one (such as a Ferrari car, a Cartier watch or a L’Oreal body lotion), information about the physical product, and an intangible product (an image, emotion or any other type of psychological freight). The physical product is under her full control and is subject to the regular tear and wear which are the result of the mundane laws of physics. A Ferrari engine would weaken over time, the watch will submit to law of gravity and stop, and the lotion will age and need to be replaced. But that is the only hazard the consumer bears. Being the sole possession of the consumer, no one can exploit the physical product without her permission.

The intangible product, on the other hand, has no reason to suffer from the same diseases which are unique to tangible assets. Theoretically, it can last as long as the physical product to which it is attached exists. Unlike the physical product, however, it is not under the control of the buyer. 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 to use the trademark lingo, diluted, if, for example, the public learns to associate the mark with an unsavory image. For example, if the public learns to associate “Coca-Cola” with drug consumption or “Bud” beers with bugs then instead of conveying a hedonistic life-style or a sense of freedom or just a pleasing association, it will subject the owner of the mark, as well as the consumer who purchased the goods, to ridicule or disgust. The focal point is that the contamination of the mark de-

---

111 Moskin, supra note 11, at 142; Welkowitz, supra note 91, at 540 (“If anything, weaker marks are more likely to suffer the fate described by Schechter”); Callmann, supra note 25 §22:14 at 22-229; Klieger, supra note 23, at 846.


113 Chemical Corp. of America v. Anheuser-Busch, Inc., 306 F.2d 433 (5th Cir., 1962).
not the product’s physical value: that will remain the same. Rather, it destroys the emotional experience and the image that accompanies it.

Contamination or, to use the trademark lingo again, dilution, divests an article from its psychological freight (or, even worse, replaces a positive psychological association with a negative one) and renders it worthless. The third party that destroys the aura of the famous mark inflicts on both the consumers and the producer an externality. He appropriates the positive image or feeling associated with the mark to his own benefit without internalizing any of the costs of such appropriation. Using the slogan “Never Leave Home Without It” in connection with the sale of condoms as a spoof on American Express’ “Don’t Leave Home Without It” will destroy 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 result in 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” in connection with radio tubes can provide consumers with the information that the radio tubes are of high quality. But, so long as the language is rich enough, the producer of the radio tube has other alternatives to describe his product without inflicting costs on others. The producer can also invest resources in coining new words to convey the desired message, if he so wishes, and consequently enrich the language.

Note that the analysis, with respect to the consumers’ interests, is backward looking. It protects the ex-ante expectations (at the time of purchase) of those who already purchased a good, against the diminution of their intangible property from the hazard of a possible externality. With regard to producers, on the other hand, anti-dilution law serves a forward looking function. It protects the mark’s ability to draw prospective customers. This is not to say, however, that the psychological freight of a mark is not subject to “wear and tear”.

Note that the analysis is true for both durable and non-durable (or even perishable) products. In the case of durable goods, such as a Ferrari car, anti-dilution law protects the high 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 detrimental activity. In the case of non-durable goods, such as a Coca-Cola drink, it is true that because of the immediate nature of consumption the product (by definition) will not endure for a long period of time and hence post-purchase protection is not required. Yet, the consumer enjoys the psychological effect which accompanies those who drink Coke (see supra note 92 for a survey finding that consumers associate Coca-Cola bottles with feelings such as ultimate enjoyment, uniqueness and universal unity). If the young or cool image conveyed by the mark Pepsi is destroyed, the consumer will not be willing to pay more than its marginal cost of production. He will also bear the switching cost associated with adapting to a new product which is able to convey the same signal (assuming such a product exists). A short life expectancy would only impact the premium for prestige, it would not eliminate it altogether, and in some occasions it may even increase it (for example, a lavish vacation signals high status, because only wealthy people would spend much money for such a non-durable instant service/good).

---

114 See infra note 134.
115 Note that the analysis is 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 high 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 detrimental activity. In the case of non-durable goods, such as a Coca-Cola drink, it is true that because of the immediate nature of consumption the product (by definition) will not endure for a long period of time and hence post-purchase protection is not required. Yet, the consumer enjoys the psychological effect which accompanies those who drink Coke (see supra note 92 for a survey finding that consumers associate Coca-Cola bottles with feelings such as ultimate enjoyment, uniqueness and universal unity). If the young or cool image conveyed by the mark Pepsi is destroyed, the consumer will not be willing to pay more than its marginal cost of production. He will also bear the switching cost associated with adapting to a new product which is able to convey the same signal (assuming such a product exists). A short life expectancy would only impact the premium for prestige, it would not eliminate it altogether, and in some occasions it may even increase it (for example, a lavish vacation signals high status, because only wealthy people would spend much money for such a non-durable instant service/good).
ers. The analysis offered here sheds some new light on the classification of trademark law in the family of intellectual property rights, whose distinguishable members: copyright, patent and trade-secret law have always received a preferable treatment as being “real” intellectual property. Trademark can also join this “hall of fame” so to speak, by protecting the intellectual property of consumers.

Another possible result of the analysis is the expansion of the dilution doctrine. While courts usually find tarnishment when a positive association is replaced by a negative one, this article argues, that a better formulation of the test should be one which protects against associations which are not consistent with the image created by the producers. A Ferrari consumer, for example, would not want the mark of its prestigious car to be affixed to a fast food chain, even if there is a consensus that the chain is the “best” of its kind. Such a use will not only blur the mark’s distinctiveness, but it will also create an association which it is very likely that Ferrari owners would oppose.

C. Price Discrimination

(i). “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. It has been argued that because the public reasonably assumes that products bearing different marks are of different quality; affixing different labels to the same product misleads consumers to pay more for what they could have purchased for less. It may also be considered a form of price discrimination. Section 2(a) of the Clayton Act, as amended by the Robinson-Patman Act (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 where the effect of such discrimination may be

\[\text{116} \text{ In a non-formal survey it was possible to find promises by producers that they will protect the image of their product. One example is the following statement given by Mark Weber, the President and Chief Operating Officer of Phillips-Van Heusen (FVH), the owner of several high-end brands in the fashion industry (such as Van Heusen and Calvin Klein): “the strength of our Company is the strength of our brands... We value, protect and build these brands with commitment and action that are unsurpassed” [emphasis added]. Available at }\text{http://www.pvh.com/BrandsProducts_PresidentsMesg.html. }\text{Feb 2005.}\]

\[\text{117 \text{ Callmann supra note 25, Vol. 1A §5:11 pp. 5-72, 5-73, 5-74 (“it is reasonable to assume that the use of different trademarks suggests that the products to which they are attached are different in nature, quality or characteristics. It is, therefore, just as deceptive for the same seller to market the identical product under different trademarks as it is to sell the same article under different prices without any justification”), Vol. 1, §4:54 p.4-587; Consolidated Books v. FTC., 53 F. 2d 942 (1931); FTC v. Berry Seed 2 F.TC. 427 (1920); FTC v. St. Louis Lightening 3 FTC 327 (1921).}\]

\[\text{118 \text{ Callmann supra note 25 Vol. 1, §4:54 p.4-587 and at Vol. 1A §5:55 p. 5-270. Note that registration of a valid mark is not a defense against a violation of the antitrust laws, even if the mark has become uncontestable. See Section 33(b)(7) of the Lanham Act, 15 U.S.C.A. §1115. Such a use may also lead to the cancellation of the mark. See Phi Delta Theta Fraternity v. J. A. Buchoroeder & Co. 251 F. Supp 968 (W.D. Mo. 1966); Callmann, supra note 25, Vol. 1, §4:53 at 4-572.}\]

\[\text{119 \text{ 15 U.S.C.S. §13(a).}}\]
substantially to lessen competition or tend to create a monopoly or to injure competition.\textsuperscript{120}

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 FTC v. Borden.\textsuperscript{121} Borden produced and sold evaporated milk under its own nationally advertised brand and under various private brands owned by its retail customers. Although the private label milk was chemically identical to the Borden brand, the latter was sold at a substantially higher price. 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. The Court of Appeals\textsuperscript{122} set aside the Commission’s order. It held that the private label milk was \textit{not} of the same grade and quality as the milk sold under the Borden brand because in determining whether products are of like grade and quality, consideration should be given to all commercially significant distinctions “\textit{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.\textsuperscript{123} In reversing the decision the Supreme Court adopted the FTC’s view that physical comparison alone determines whether products are of like grade and quality.\textsuperscript{124} The Court explained that because “like grade and quality” is a threshold requirement essential to the applicability of the RPA, if producers are able to differentiate their product by merely affixing different labels they would be able to immunize themselves from Section 2 scrutiny. The court

\textsuperscript{120} 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) involving commodities; 4) of like grade and quality; 5) that may injure competition (Dyno Nobel, Inc. v. Amotech Corp. 63 F. Supp. 2d. 140, (D.C.P.R., 1999)). Price discrimination may be defended on the following grounds: (a) to “meet competition”. That is, to meet a competitor's offer based on a “good faith” belief that such reduction is necessary to make the sale; (b) if there is a “cost justification” (where 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. Some courts also allow the “availability defense” when the seller offered the same commodity at different prices, but the lower price was available to all buyers. Callmann \textit{supra} note 25 seems to reject the availability defense in the trademark context, noting that the fact “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. To insist that the manufacturer reveal the true facts would lead to the termination of that system of dual distribution. The same would occur over the course of time if the dual distribution systems becomes widely known”. Id at p. 5-74.


\textsuperscript{122} Borden Co. v. FTC, 339 F.2d 133 (5th Cir. 1964).

\textsuperscript{123} The Courts of Appeals explicitly held that mere affixation of different labels to physically identical products will not suffice. Rather, a showing of a “demonstrable consumer preference” for one brand over the other is required to reach a conclusion that the two product are of different grade. Id at p. 137-8.

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.\(^{125}\) It therefore remanded the case so that it could be ascertained whether the price discrimination resulted in a competitive harm.\(^{126}\)

This article challenges the Borden decision. It argues that Borden is inconsistent with the Supreme Court’s long standing policy according to which “the public is entitled to get what it chooses, though the choice may be dictated by caprice or by fashion or perhaps by ignorance”, and that “shoddy and petty motives may control those preferences; but if the buyers wish to be snobs, the law will protect them in their snobbery”. It is in direct contrast with the Supreme Court decisions in Royal Milling and Algoma Lumber, where it was held that “if consumers or dealers prefer to purchase a given article because it was made by a particular manufacturer [such as Borden] … 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”.\(^{127}\) It also leads to an anomaly in which one branch of the law, that is anti-dilution, recognizes and fosters persuasive advertising; whereas another branch of the law, that of price discrimination, ignores the same persuasive value and unreasonably impairs the ability of producers to capitalized on their investment.

Moreover, the Borden decision 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; whereas 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. The Borden decision has also a chilling effect. Subjecting manufacturers to the more flexible tests of the RPA deters them, ex-ante, from selling the same product under different brands, thus limiting competition in the psychic space.\(^{128}\)

\(^{125}\) Id at p. 643-4 and at p. 646.

\(^{126}\) 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”. 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”. Borden Co. v. FTC, 381 F. 2d 175 (5th Cir. 1967). See also ITT Continental Baking Co. 104 F.T.C. 280 (July 25, 1984) (The FTC found that the a price differential ranging from 25 percent to 38 percent between private label products and national brand did not injure competition on the secondary line because it could be explained by consumer preferences and the substantially greater costs associated with promoting the national brand).

\(^{127}\) See also the dissent opinion in Borden by J. Stewart at p. 651-2 (“Commerically 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”).

\(^{128}\) See for example J. C. Bruno, Business Problems and Planning: Negotiating Private Label Agreements, 74 MI Bar Jnl. 1292, 1293 (1995) offering a model ‘Policy Guidelines for Private Labeling’ to be adopted by a manufacturer. In section 5, “pricing”, the author suggests that “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… 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
The suggested analysis, on the other hand, mandates the conclusion 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 sphere. It is only the total (or full) price of the commingled products which is misleading. The following example is illustrative. Consider an economy with two producers where producer A manufactures a widget at price $P_A$ and a trademark level of $T_A$ whereas producer B manufactures the same widget at price $P_B$ and a trademark level $T_B$ such that $T_B > T_A$, $P_A \neq P_B$. The price of each widget can be broken into three components: the 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 load. 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, at the market of fame ($T_B > T_A$). For instance, Cartier and Swatch, to name a few, are brand names for watches which (ignoring quality differences) compete at the market for tangible goods. Cartier, however, sells an “image” of luxury while Swatch sells an “image” of being young in spirit and “hip”. Enabling each producer to manufacture the same article under different labels and charge different prices will enhance social welfare. It will result in 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 of fame (Cartier can manufacture the same watch under a brand that will target young spirited consumers). 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. The result is that a law under which price discrimination of same article using different labels is illegal, thrusts upon producers a monopoly power and fosters price differentiation (at least at the fame level).

In Borden, the Supreme Court provided two examples to explain why in its view transactions involving physically identical products bearing different labels are “too laden with potential discrimination and adverse competitive effect” to be excluded from the reach of the RPA. These examples, however, do not support the court’s view. First, the Borden 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”. The court failed to recognize that the two products are not substitutes! The branded product and the unbranded one constitute two different product markets. 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 an added value be granted without a written analysis as to why the price was charged, e.g., to meet competition or differences in cost or performance...”.

Another example is a case where a manufacturer enjoys a monopoly in the market for goods, for instance, because of a patent. Because of the Borden decision, the manufacture can market his product only under one label. Thus, he will chose an output $Q_1$ and a trademark level $T_1$ which maximize his profits. Enabling the monopolist to sell more of the same product under different label with a different trademark level $T_2$ ($T_2 \neq T_1$) will unambiguously lead to an increase in output of the same physical product. Assuming without limitation that $T_2 < T_1$, consumers who could not themselves afford the more prestigious widget would be able to purchase the same physical product under the less prestigious label. The increase in output is also likely to cause an decrease in the marginal cost of production. Enabling the monopolist to price discriminate is therefore a Pareto superior solution.
from the famous label. Simply put, consumers of the cheaper brand are not potential consumers of the famous label. Thus, the seller of the branded product is not harmed. Interestingly, the Gillette Court has arrived at the opposite conclusion from Borden in discussing the relevant market for merger analysis. In that case, Gillette offered to merge with Parker Pen Holdings. The Department of Justice sought to enjoin the merger on the ground that it would lessen competition. 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). It explained that “premium” pens do not compete with “base” pens because the former “afford their users as well as those who merely put them in their breast pockets image, prestige, and status”. It held that because of the prestige component, should the price of a premium pen costing, for example, $60, be increased, “consumers will nonetheless purchase the now-costlier pen rather than substitute a less expensive, less prestigious model”. In other words, the court concluded that the two types of pen are not competing because one type conveyed an image the other didn’t.

The second example given by the Borden court in support of its decision 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.”

---

130 U.S. v. Gillette Company, 828 F. Supp. 78 (D.D.C 1993) (finding the relevant product market to be all premium writing instruments with suggested retail prices from $40 to $400).
131 The analysis was made under Section 7 of the Clayton Act. 15 U.S.C. §18.
132 Id at p. 82 (“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 SRP’s (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 which are priced below this threshold. The evidence suggests that, should the price of a fountain pen costing, for example, $60 be increased in a non-trivial, non-transitory fashion, consumers will nonetheless purchase the now-costlier pen rather than substitute a less expensive, less prestigious model. In other words, there is a low cross-elasticity of demand between these pens and those priced below $50”).
This article, on the other hand, suggests that the so-called “effective advertiser” should be rewarded. Since it was that “advertiser” who created the added value (that is, the psychological load) to consumers, he should be able to sell the physically identical product at different prices without being subject to the risk that he may be found liable for antitrust violation. Exempting the producer from the risk of the RPA will unambiguously lead to increase in output and total welfare. Indeed, such a regime has been adopted in Canada. Section 50(1)(a) of the Canadian Competition Act\(^\text{133}\) is very similar to Section 2 of the RPA. It prohibits any seller from discriminating, directly or indirectly, in price between different purchasers “of articles of like quality and quantity”. Yet the enforcement agency has taken the view that a trademark or label alone, to the extent they give 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. Interestingly, it gave an example which is a recast of the facts in Borden, concluding that “In this situation, the brand differentiation will generally be sufficient to cause the Director to conclude that the articles are not of ‘like quality’.”\(^\text{134}\) It is suggested here that a similar interpretation be adopted with regard to the RPA.\(^\text{135}\)

### (ii). “Commodity”, Famous Brands and the Tangibility Requirement

Even if the Borden decision holds, the thesis of this article leads to the conclusion that the RPA may not apply at all where products are sold under famous marks because such products may not be considered “commodities” for the RPA 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. Although the RPA contains no definition of the term “commodity” courts have interpreted the term to

\(^{133}\) R.S.C. 1985, c. C-34.

\(^{134}\) Section 2.5.8.1 of the Director of Investigation and Research, Price Discrimination Enforcement Guidelines (1992), reprinted in 63 Antitrust & Trade Reg. Rep. (BNA), Spec. Supp. No. 16 (Sept. 17, 1992) (the “Guidelines”). The Director of Investigation and Research (who is responsible for the administration and enforcement of the Competition Act) provides two examples in the guideline. The first is a recast of the facts in Borden: “assume that a supplier manufactures identical articles sold to retailers under a brand name or label of the supplier’s choice, and a brand of the retailer’s choice. Assume further that the supplier engages in heavy local and national advertising to promote its own brand, successfully cultivating a consumer preference for it, and that the advertising is successful to the extent that both the retailer and consumers ordinarily pay a different price for it than they pay for the retailer's private brand. In this situation, the brand differentiation will generally be sufficient to cause the Director to conclude that the articles are not of ‘like quality’.”

\(^{135}\) Interestingly, during the house hearing 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. Hearing on H.R. 4995, H.R. 8442 before the House Committee on the Judiciary, 74th Cong., 2nd Sess. (1936) at 421). The amendment was not adopted. During the debate on the bill Representative Patman was asked about the private label issue. His response was 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” (80 Cong. Rec. 8115). But see the dissent in Borden holding that “on 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 at p. 654.
apply only to tangible products.\textsuperscript{136} Thus, it has been held, for example, that the RPA does not apply to the sale of services,\textsuperscript{137} mutual fund shares\textsuperscript{138} or licensing agreements.\textsuperscript{139} The distinction between tangible products (which are subject to the RPA) and intangible ones (which are not), however, is not always an easy one. This is because a transfer of any intangible is often accompanied by a transfer of tangible assets (recall the analogy to software and its physical embodiment). In such cases, in order to determine whether a certain transaction falls under the provisions of the RPA courts rely on the “dominant nature of the transaction”.\textsuperscript{140} In Freeman,\textsuperscript{141} for example, the Seventh Circuit found that the RPA does not apply to the sale of a title insurance although the insurer provides the purchaser with a physical document, because it is the performance of a service (namely, the search of records which might reveal a defect in the title and the rendering of an opinion based upon this search) and not the delivery of a physical document (which embodies that service) that constitutes the dominant nature of the transaction.\textsuperscript{142}

Because this paper views a product sold under a famous mark as comprised of a tangible and intangible products, one may argue that it may not be considered “a commodity”. This is especially the case where the psychological load is the true product and the tangible product is nothing but a platform. In such cases, one may argue that the “dominant nature” of the product is its intangible aura, and therefore its sale should not be subject to the RPA.\textsuperscript{143} Under this approach, one can view the sale of a branded good as a two-part transaction: a complete sale of a physical product (and information regarding that product); and a licensing agreement under which the consumer receives the right to use the psychological load attached to the product whereas the producer promises to maintain the mark’s fame for the duration of the tangible product (whether by prosecuting infringers or third parties who cause dilution).\textsuperscript{144} The licensing of intellectual property (although in other contexts) has been already recognized by the federal courts as one


\textsuperscript{137} The Morning Pioneer Inc. 493 F.2d at p. 389.

\textsuperscript{138} Baum v. Investors Diversified Services, Inc., 409 F.2d 872 (7th Cir. 1969).


\textsuperscript{140} Tri-State Broadcasting Co., Inc. v. United Press International 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, where the two products—the tangible and intangible—can be sold separately. In such cases only the physical product would be subject to the RPA. See for example Metro Communication Co. v. Ameritech Mobile Com. Inc., 984 F. 2d 739 (6th Cir, 1993).

\textsuperscript{141} Freeman v. Chicago Title & Trust Co., 505 F. 2d 527 (7th Cir. 1974).

\textsuperscript{142} Kennedy Theater Ticket Serv. v. Ticketron, Inc., 342 F. Supp. 922 (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).

\textsuperscript{143} The dominant nature is not measured by merely breaking down the costs between intangible service and tangible goods provided, although it has been held that such a comparison might be useful as one of many factors to consider. May Department Store v. Graphic Process Co., 637 F.2d 1211, 1215 (9th Cir. 1980).

\textsuperscript{144} See supra note 120 and accompanying text.
which is not subject to the RPA.\textsuperscript{145} Adopting the interpretation suggested in this part will, therefore, be consistent with prior cases.

\textbf{(iii). A Practical Note}

Although the Borden decision 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 that common. Several reasons may account for this phenomenon. First, enforcement of the RPA by the agencies has been decreasing dramatically in past years.\textsuperscript{146} Private litigation has also been reduced due to the strict requirements of the RPA and judges’ skepticism with regard to the injurious effects of price discrimination.\textsuperscript{147} Another reason may be attributed to the “availability theory”. Under this judge-made doctrine, if the seller offered different prices for the same commodity to different buyers, but the lower price was available to all, there is no RPA liability. Applying the availability theory to the dual branding setting, one may argue that where a manufacturer offers its customers both the premium and non-premium brands there can be no RPA concern.\textsuperscript{148}

Yet RPA liability should be a valid concern. To start with, private enforcement of the RPA, fueled by the prospects of gaining treble damages, is still commonplace. Moreover, there is support for the view that the availability doctrine cannot offer a true remedy. In order to rely on the “availability theory”, the manufacturer must demonstrate that the lower price was \textit{practically} available to its customers and that the latter were in fact \textit{informed} of its availability.\textsuperscript{149} Put differently, to enjoy the availability defense the manufacturer must inform its customers that its branded and unbranded products are physically identical. But, as Callmann notes, “to insist that the manufacturer reveal the true facts

\textsuperscript{145} La Salle Street Press, Inc. v. McCormick And Henderson, Inc., 293 F. Supp. 1004 (N.D.I. 1968) holding that a patent license agreement granting is not covered by the term “commodity”.

\textsuperscript{146} The antitrust Division of the DOJ 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: R. Pitofsky H. Goldschmid and D. P. Wood, Trade Regulation (5th Ed., 2003) at p. 1290; W. C. Holmes, Antitrust Law Handbook (2005 Ed.) Section 4.2 p. 578-9; I. Scher, Antitrust Advisor (4th Ed.) at 9-40; E. W. .Kintner and J. P. Bauer, Federal Antitrust Law (1983), Vol. 3 S30-3 p. 645. Similarly, since 1980 the FTC has attempted to enforced the Act only twice. See Pitofsky and Wood at p. 1290. The authors report that of these two attempts, the first was abandoned and the second was settled.

\textsuperscript{147} See Pitofsky and Wood, \textit{supra} note 146, at 1290. Among these requirements are those pertaining to standing and damages. The latter is not an easy one. For example, while liability for price discrimination arises when one “may” cause injury to competition, to recover damages the plaintiff has the burden to prove actual injury.

\textsuperscript{148} Indeed, such an approach was taken by the dissenting opinion in Borden. In a footnote of the dissent opinion Judge Stewart noted that “so 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 \S2(a) can be made out”.

\textsuperscript{149} Caribe BMW, Inc v. Bayerische Motoren Werke Aktiengesellschaft, 19 F. 3d 745, 752 (1st Cir., 1994) (“we do not see how ordinarily one could say that a seller has made favored treatment ‘available’ to a disfavored customer if the disfavored customer \textit{does not know} about the favored treatment” (emphasis in original)); DeLong Equip Co v. Washington Mills Abrasive Co., 887 F. 2d 1499, 1517 (11th Cir., 1989), cert denied, 494 US 1081 (1990); Century Hardware Corp v. Ace United Corp., 467 F. Supp. 350, 355-6.
(about the physical identity) would lead to the termination of that system of dual distribution”.\textsuperscript{150} Thus it seems that 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 secondary-line injury (injury 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 “discrimination in price” or whether it is a defense against the substantial “injury” requirement.\textsuperscript{151} In the first case, if availability denies the finding of a prima facie price discrimination, it would provide the manufacturer-seller with an absolute immunity. Under this view the dual pricing creates only a price differential but not price discrimination. If, however, availability is only a “defense” against injury, then it would only bar the disfavored customer (who had the option to buy the same commodity at a lower price but\textit{ chose} not to do so) from asserting a secondary-line injury claim. It arguably may not serve as a defense against injury which results to competitors of the manufacturer (first-line injury), who lost sales because of the dual pricing.\textsuperscript{152} Manufacturers who wish to use dual pricing methods are therefore still exposed to antitrust liability.

\section*{V. THE MODEL—A FORMAL APPROACH}

\subsection*{A. The Basic Model}

This section provides a formal description to the intuition discussed below. It constructs 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 which can not be verified even post-purchase); and the demand for the intangible aura, status or satisfaction that is an-

\textsuperscript{150} Id at p. 5-74.

\textsuperscript{151} For authorities holding that the availability of lower price negates the finding of price discrimination see Rod Baxter Imports Inc. v. Saab Scandia of America, Inc., 489 F. Supp. 245, 248 n.2 (D. Minn. 1980); Pitofsky and Wood supra note 178 at 1285; Holmes supra note 178, at S4.4 p. 628; Scher, supra note 150, at 4-64. For authorities raising both bases as possible explanations see: Kintner supra note 146, 19:5; Ira A. Millstein, The Status of “Availability” Under Section 2(a) of the Robinson Patman Act, 42 N.Y.L. Rev. 416, 417-8, 426 (1967); Callmann, supra note 25, S7:3, p. 7-152; DeLong Equipment Co. v. Washington Mills Abrasive Co., 887 F. 2d 1499, 1517 (11th Cir. 1989).

\textsuperscript{152} Millstein supra note 151, at 427-8; Scher supra note 178 ,at 4-17; Kintner and Bauer, supra note 150 Vol. 3 at 20:18 p. 136 and 25:7 at p. 455-9; But see Kintner at 25:7 p. 455 noting that “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 option which where open to the disfavored buyer; it might then follow that primary line actions are no covered by the ‘availability’ defense.. [s]ome courts concluded that this second line analysis is preferable and at least one court has accepted this view and suggested that primary line actions might not be barred by the availability defense. Others accepted 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 seller 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 accepted the lower price offered to the competing sellers would have suffered even greater injury’. That is, there is absence of the necessary nexus between the lower price to some buyers and the injury to the competing sellers”. See Millstein, supra note 151, at p. 445.
nexed to the tangible product. The model is related to that of Stigler and Becker (S&B)\textsuperscript{153} and Becker and Murphy (B&M).\textsuperscript{154} 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. It argues that in certain circumstances one cannot purchase and consume an advertisement without buying the physical product it promotes. More importantly, it does not assume that persuasive advertising “gives favorable notice to other goods.”\textsuperscript{155} In this respect, it also deviates from the signaling models, which argue that the role of advertising is limited to imparting information about the physical product that branding endorses.\textsuperscript{156} Instead, it claims that branding creates a \textit{new} intangible good which must piggyback on the physical one. Moreover, S&B conclude that absent asymmetric information branding will \textit{not} occur.\textsuperscript{157} Conversely, this article explains why branding occurs 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.

I begin by acknowledging that dilution, persuasive branding and price-discrimination are all intra-brand phenomena.\textsuperscript{158} Thus, to model the impact of persuasive branding I rely on a model I developed elsewhere to analyze the role of trademarks and branding in intra-brand settings.\textsuperscript{159} 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 (the seller is assumed to know his product’s qualities whereas the consumer does not). It shows that consumers of such products incur uncertainty costs which cannot be eliminated absent trademarks or similar mechanisms. To illustrate, assume that a consumer at the local Starbucks wishes to use a sweetener with her coffee. She can choose “Equal”, “Splenda” or “Stevia”—to name few of the most common brands.\textsuperscript{160} Assume

\begin{footnotesize}
\begin{enumerate}
\item Stigler and Becker, \textit{supra} note 26.
\item Becker and Murphy, \textit{supra} note 10.
\item Id at p. 941, 945. Becker and Murphy also differ from this paper because they argue that ads “create wants” and increase the demand for the physical product.
\item This approach is mainly attributed to Phillip Nelson. See \textit{infra} notes 24 and accompanying text.
\item Stigler and Becker \textit{supra} note 26, at 84-5.
\item I use the terms intra-brand and inter-brand to denote two different phenomena. By “inter-brand” activity I refer 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 to identify the product they want amongst a set of substitutable products available in the marketplace. Examples of situations which can be characterized as inter-brand settings are a consumer’s decision whether she should choose product manufactured by producer A over product manufactured by B. Similarly, trademark infringement is an inter-brand phenomenon. When producer A palm off his goods as B’s, an inter-brand confusion is caused. Conversely, I use the term ‘intra-brand’ to refer to decisions at the manufacturer level. For example, once the inter-brand decision has been made (which product should the consumer buy), the next question: how many units of that product should she consume calls for an intra-brand analysis. Similarly, when a seller passes-off his own products, not as someone else’s, but rather as possessing attributes they do not in fact possess, an intra-brand confusion arises. A producer’s decision to brand the same product under different trademarks is also an intra-brand decision. See Dilbary, \textit{supra} note 51; Dilbary, \textit{Trademarks As a Media for False Advertising in Intra-Brand Settings} (unpublished manuscript, 2006).
\item Dilbary, \textit{supra} note 158.
\item “Splenda” is a no calorie, non-carbohydrate sweetener made of sugar which is suitable for everyone including people with diabetes and is made by Johnson and Johnson; “Equal” is a no calorie sweetener which contains less than one gram of carbohydrate is aspartame based, and is manufactured by Merisant;
\end{enumerate}
\end{footnotesize}
further that she has already made her (inter-brand) decision to purchase the sweetener Splenda whose taste she likes most (an experience quality). Aware of the health problems that are associated with aspartame-based products and increased consumption of calories, carbs and the risk of diabetes, she is interested to know these attributes before consumption. If it is a low calorie sweetener or if it is made of an ingredient that makes it suitable for people with diabetes, the consumer will be willing to use it generously; if high in calories or aspartame-based she will purchase less of it (I refer to the more desirable product as a “high quality” one). Because the consumer 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 happen simultaneously 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, \( P_0 \), and her own belief regarding the product’s credence qualities, the buyer decides what will be 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 costs, she cannot eliminate them altogether. This minimum (but positive) expected error is, therefore, her subjective demand for information about the product’s physical attributes (the consumer will be willing to pay a positive amount of money to reduce her error). In the second stage the seller chooses his strategy. Once the buyer has already minimized her 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 to either inform the consumer about his product credence attributes or keep “silent.” If the seller decides to brand his product and convey additional (yet truthful) information to buyers, the model shows that such an activity will minimize further the expected error cost and will (where the product is a high quality one) unambiguously increase sales. Trademarks do so, the argument goes, by reducing the buyers’ subjective probability to err. After discussing the informational role of trademarks, the model is extended to persuasive branding.

(i). The Consumer Strategy

Assume two linear inverse demand curves for a single product or service which take the form:

\[
(1) \quad D_1^{-1}: P = a_1 - bQ \\
(2) \quad D_2^{-1}: P = a_2 - bQ
\]

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” one, where \( a_1 > a_2 > 0 \), and \( b > 0 \). For simplicity I assume that there are two states of nature: a “high quality” product and a “low quality” one. For a similar assumption see S. Grossman, The Informational Role of Warranties and Private Disclosure about Product Quality, Journal of Law and Economics, Vol. 24, No. 3 p. 461, 471(1981). This article is different than Grossman’s for several reasons. Grossman considers two cases, one in which a seller

“Stevia” is a zero carb, zero calorie sweetener made of herbs and is manufactured by the Steviva Corporation.

For simplicity I assume that there are two states of nature: a “high quality” product and a “low quality” one. For a similar assumption see S. Grossman, The Informational Role of Warranties and Private Disclosure about Product Quality, Journal of Law and Economics, Vol. 24, No. 3 p. 461, 471(1981). This article is different than Grossman’s for several reasons. Grossman considers two cases, one in which a seller
“error span”\textsuperscript{162}) is the per-unit quality difference or, in other words, it is the marginal price difference between a high quality product and a low quality one and it is constant for every 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 $20 more than if it were a high-calorie aspartame-based one. I assume that the only difference in the intercepts is due to the credence quality at question.\textsuperscript{163}

Because of want of information with regard to 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 calorie and contains no aspartame (high quality product) or whether it has lots of calories and chemical substances (low-quality product).\textsuperscript{164} Put differently, 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 product versus low quality one), I use $\theta$ to denote the probability that the buyer makes quality statements which are ex-post verifiable and another in which the statements are too costly to verify ex-post but nevertheless have some characteristics which are observable ex-post. For example, the quality of a car is hard to verify but it is easy to observe whether it breaks down. This paper, on the other hand, discusses credence quality which are not verifiable and not observable 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. Quite the opposite: I assume the seller may want to mislead consumers and that the consumer is purchasing a number of units. In fact, I wish to investigate how the number of units purchased by a certain consumer is affected by a fraudulent seller. Moreover, Grossman discusses warranties as signal for information. He reasons that if the seller does not provide a warranty (or discloses that his product is of high quality) the consumer can infer the product is of low quality. In trademarks, however, such a separating equilibrium does not necessarily occur. See infra note 170.

\textsuperscript{162} Because I show that $Q_C - Q_A = (a_1 - a_2)/b$, $d = |Q_C - Q_A|$ is a linear transformation of the “error span”.

\textsuperscript{163} For simplicity I also assume a level of $P_0$ such that $a_1 - a_2 < P_0$. This assumption simplifies the model by insuring that the first minimization process (the buyer’s strategy) could be easily illustrated graphically.

\textsuperscript{164} It is easy to think about other examples. 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 free of certain ingredients (such as sugar, fat from animals, etc.), whether it is dairy, non-kosher or tested on animals, or is hand-made, recyclable, etc.
places on the product’s quality. More specifically, the buyer believes that the probability that 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 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. If mistaken, however—that is, if she thinks the product to be of high quality when it is really of low quality—she will purchase $Q_C$ units and will 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 down-sloping demand curve). If she believes (at probability $1 - \theta$) that the product is of low quality when it is actually high-fat 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 $Q_A \leq Q_A + x \leq Q_C$. $x$, therefore, serves as a “dimmer”: the larger it is, the closer the quantity purchased is to $Q_C$; and the smaller it is the closer the quantity is to $Q_A$. On the extremes, if $x = 0$ the buyer purchase $Q = Q_A$ units, and if $x = Q_C - Q_A$ the buyer purchase $Q = Q_C$ units. For every $x$ it is possible to formulate the general expected error function $E(e^Q)$:

$E(e^Q) = (1 - \theta)S_{ABD} + \theta S_{GBC}$ or, $E(e^Q) = \frac{bx^2}{2} - \theta(a_1 - a_2)x + \frac{\theta(a_1 - a_2)^2}{2b}$

The buyer, absent any additional information and based 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 $x^*$ that minimizes her expected error costs. Rearranging the first order condition in equation (4) yields $x^*$ (and thus $Q^*$) which brings the expected error function to its extremum:

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

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

**Proposition 1**: $x^*$ which brings the expected cost to a minimum will be always positive and the buyer 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 $Q_C$. Proof in Technical Appendix A.

---

165 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.

166 Or, more generally: $E(e^Q) = (1 - \theta)\int_{Q_A}^{Q^*}(P_0 - D_1) + \theta\int_{Q^*}^{Q_C}(D_2 - P_0)$
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 $0 < E(e^{Q*}) < E(e^{Q_A}) = E(e^{Q_C})$. See Appendix A.

Corollary 1 implies that even after the buyer has minimized her error-cost by choosing $x^* > 0$, she will nevertheless have a positive error-cost or, put differently, a positive demand for information denoted by equation (6). The buyer will be willing to pay for information regarding the tangible product any sum of money so long as her minimum expected cost is higher or equal to the cost of information.

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. Proof in Appendix A. The intuition behind proposition 2 is simple. The more impact a credence quality has on the utility a consumer extracts from the product, the higher is the cost to the buyer from an erroneous decision (or valuation of that credence quality).

![Figure 2: The Relation between x and E(e) for $\theta = \frac{1}{2}$](image)

Figure 2 summarizes the consumer’s strategy. By differentiating equation (6) we can derive $\theta$ that brings the expected cost to a minimum. A simple calculation shows that this will occur when $\theta = \frac{1}{2}$ at which point the consumer purchase $x^*$ units and faces an expected error cost of $E_{\text{Min}} = \frac{(a_1 - a_2)^2}{4b}$. I refer to this point as the “point of ignorance” denoted by the letters $Ig$. The intuition behind this result is quite 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. Any information regarding the product or the service at hand—that is, any (truthful) information which will either decrease or increase $\theta$—will unambiguously 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. If she chooses to purchase

---

167 The model can be easily extended to cases where the consumer has prior information, in which case $\theta \neq \frac{1}{2}$. It can also be extended to discuss cases of false optimism (for example when the consumer possess a belief of $\theta = 0.75$ when she should have, based upon the objective information available to her, a lower level of $\theta$) or false pessimism.
Q = Q_A or Q_C she runs the risk of incurring high costs (indeed, the expected costs from choosing Q = Q_A, Q_C is maximal).

(ii). The Producer’s Strategy

Proposition 3: The stronger the consumer’s subjective belief that the product is of high quality (θ > ½) the higher will be the number of units purchased by the buyer. Proof in Appendix A.

Figure 3: Summary of the Two-Step Minimization Process (For θ = ½).

Proposition 3 is crucial to the understanding of the provisions of the Trademark Act. The profit maximizer 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) he can cheat and convey false information about his product credence qualities. If he chooses to raise his product quality, he can convey that information by using a trademark. The mark “Splenda”, for example, has acquired a secondary meaning in the mind of consumers as denoting a “no calorie sweetener [which] tastes like sugar because it’s made from sugar”, 168 “Dr. Price” signified for the consuming public a cream of tartar based baking powder—not phosphate; 169 “Evian” has become synonymous with natural spring water from the French Alps. A trademark that provides positive information will increase θ (such that θ > ½), and lead to a higher consumption (the mechanism is discussed below). 170 This is illustrated in figure 3 by a movement from the point of ignorance (Ig) to

---

168 Splenda is made through a patented process that starts with sugar and converts it to a non-carbohydrate no-calorie sweetener (sucralose). For more information see www.splenda.com.
170 Of course, the information conveyed by a mark will always be “positive”. This requirement can be easily satisfied, however, because each product can be thought of a function of a set of attributes X=A(a_1.. a_n) and every producer may use its mark to highlight a positive attribute of its product. McDonald’s can use its mark to impart information not regarding the nutritional value of its hamburgers but rather their taste, sanitary conditions and so on. The linguist, Roger Shuy has narrowed down to the message conveyed
point F. At this point (F) the buyer’s error costs decreases further (E_F < E_{Ig} = E_{Min}, Q_1 > Q_{Ig}) the result of which is an increase in total welfare. Similarly, if the mark provides negative information about the product credence qualities (because of, for example, governmental regulation, e.g. labeling requirements) although the buyer will purchase less than she would had she been at the “ignorance point”, her error-costs will nevertheless unambiguously increase. This is illustrated by a movement from the point of ignorance to point G (E_G < E_{Ig}, Q_2 < Q_{Ig}).

Rather than improving its product’s credence qualities, 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 the active ingredients, 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 the consumers by providing false information in order to increase their sales without incurring the cost of improving their products. For example a seller can tout its cheese as being “Roquefort” although it was not made in the French locality. In such a case, the defrauded consumer would think she is at point F where in fact she would be in point H where her costs are higher than at the point of ignorance. Cheating, as Figure 2 demonstrates, will result in an increase of the producer’s sales but it will reduce consumers’ welfare at a magnitude of E_G – E_{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 filling their mouths with water, and not conveying any information, low-quality sellers may be able to sell more. 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.\(^{171}\)

The seller can influence the buyer’s subjective belief by number of methods, one of which is using a trademark. This can be formally presented as:

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

by the McDonald’s mark to: “basic, convenient, inexpensive and standardized” (see Roger Shuy, *Linguistic Battles in Trademark Disputes* (2000), p. 95-109, 99). One court has held that the prefix “Mc” denotes “quality, service, cleanliness and value” or “Q.S.V.C” (Quality Inns International Inc. v. McDonald’s Corporation, 8 U.S.P.Q. 2d. 1633 (Dist. Mass., 1988)).

\(^{171}\) The model leads to the conclusion that a pooling equilibrium will occur. In this regard the model differs from the signaling literature which views the presence of a warranties as signal of a good product and its absence as a signal to a bad one. In a trademark setting, on the other hand, the fact that a mark does not convey information about credence qualities (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 only of 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 different attributes. Every seller can use its mark to convey information about the attribute its product is most valued for. One would 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.
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 is equal to (–1) if trademark implies that the product is of “low quality”; $T$ is an index of the trademarks’ strength ($T$ is equal to 0 where the product is not branded and increases with the trademark’s strength); and $L$, which I assume to be constant, is the marginal change in the probability $\theta$ caused by an increase in $T$. By substituting $\theta$ in equation (6) with its formulation in equation (7), and differentiating the achieved expression with respect to $T$, I show that the stronger the trademark is the smaller the expected error cost becomes.

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

Proposition 4: From equation (8) it follows that where information is truthful, the buyer’s error costs are minimized regardless of the trademark’s sign (positive/negative). Whether $\delta = –1$ or $\delta = 1$ it unambiguously reduces $E(e)$ with any increase in $T$ ($\forall \delta \, \frac{dE}{D\delta} < 0$). Proof in Appendix A. This is illustrated by Figure 2 (the seller’s strategy).

B. Extending the Model: Persuasive Branding

I now turn to model Snobbism (I will use interchangeably the terms “famous” and “persuasive” to describe marks which influence buyers’ demand by adding a psychological freight). While in the basic model above the only effect of trademark was to unambiguously reduce buyers’ error cost and increase sales by imparting information about the product’s credence qualities, in the case of persuasive marks the outcome is ambiguous. This time, a trademark serves two roles. As in any intra-brand setting, it reduces consumers’ error cost and leads to an increase in sales (where $\delta = 1$). However, it also creates a pleasant feeling or portrays an image that makes the product more “desirable” or more appealing. While in its first hat, as a cost-reducer, a trademark has no impact on prices in its second hat, that of creating an aura or a “product-appeal” it does. It 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 equation (1) and (2), I denote the inverse demand curve for a product such as “Ferrari”, “Armani”, L’Oreal lipstick and the like, whose trademarks enjoy high popularity, as follows:

$$D(p, f, n): Q = \frac{a + \psi f(T, \epsilon, n)}{b} - \frac{1}{b} P$$

Where $f$ (for “famous” or “fame”) is a popularity index, which is a function of $T$, the trademark strength, and $\epsilon$ —other factors (such as a pleasant design). I assume that an increase in $T$ increases the product’s popularity ($f'_T > 0$) and that the marginal contribution is decreasing ($f''_T < 0$). That is, the stronger the trademark is, the smaller is the contribution of an additional unit of trademark to the product’s popularity. The demand for the

---

172 The trademark level $T$ is a function of advertising campaigns ($T = F(\text{advertising})$).
product is thus dependent upon the price, $P$, and it increases with an increase in the popularity which implies $\psi > 0$. Note that I no longer assume that an increase in $T$ has no influence on prices. In the current formulation of the model, the seller has some ability to influence the price $P$ 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 were consumers can purchase both Armani and Boss, everything else being equal. This implies that $D'_N < 0$, $f'_N < 0$ for every increase in $n$. For this very reason it was argued above that enabling producers to sell the same tangible product under different labels and charging different prices would enhance competition and will result in a decrease in prices. Such activity implies more lines of production and vibrant competition at the psychic sphere. The introduction of more firms (that is increases in “$n$”), reduces “$f$” and unambiguously leads to a decrease in the fame effect discussed below.

By holding the number of firms, $n$, constant and repeating the methodology of the basic model it is possible to calculate the correlating quantities $Q_E$ and $Q_F$ (instead of $Q_A$ and $Q_C$ in Figure 1), the error span ($d|Q_F - Q_E|$), the error costs as a function of $T$, its maximum and minimum and the quantity $Q^*$ (See Figure 3 for illustration and Appendix A’ for calculations):

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

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

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

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

\[
(14) \quad x^* = \frac{(a_1 - a_2)}{2b} + \frac{\delta L T (a_1 - a_2)}{b}, \quad 0 < x^* < (a_1 - a_2)/b
\]

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

\[
(15) \quad Q^* = Q_A + x^* = \frac{a_1 + a_2 - 2P_0}{2b} + \delta L T \frac{(a_1 - a_2)}{b}
\]

\[
(16) \quad Q'^* = Q_E + x^* = \frac{a_1 + a_2 - 2P_0}{2b} + \delta L T \frac{(a_1 - a_2)}{b} + \left[ \frac{\psi f(T)}{b} - \frac{p_i(T) - P_0}{b} \right]
\]
It is now possible to provide a graphical description of the dynamics which occurs when the producer decides to persuasively brand his product. An increase in T creates three effects. First, an increase in the trademark level T increases the “fame” of the product and makes it more appealing. This in turn causes to an increase in the demands for the product at a magnitude of $\psi f/b$. I refer to this impact as the “fame or psychological effect”. Figure 4 illustrates the fame effect by a right shift of the demand curves. Everything else held equal (specifically, assuming P remains $P = P_0$) such a move would have caused an unambiguous increase in the quantities 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, would have caused the point of ignorance to increase so that the new point of ignorance, $x^{lg}$, would shift to K ($Q_D < Q^{lg}_K < Q_B$).

![Figure 4: The Impact of Persuasive Marks on Consumers’ Demand](image)

But the increase in fame also causes a price effect which reduces the quantities at a magnitude of $(P_1 - P_0)/b > 0$ 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 point K to I. Lastly, an increase in the trademark level provides more intra-brand information about the products credence qualities which increases the quantity purchased by moving the consumer away from the new ignorance point (I) ($the informational effect$). This informational effect is of magnitude $\delta L(T_1 - T_0)(a_1 - a_2)/b$ and it causes to a subsequent move right on the horizontal line $[I, F]$. The three effects can be easily shown by calculating the difference in quantity before and after the increase in T:

$\text{Equation (16) is broken down into four components: The first expression is the demand for the physical product at the point of ignorance (thus it is independent of T). The second expression illustrates the informational effect. It is the increase in demand for the physical product due to the favorable information the trademark conveys about the product’s physical qualities. The third expression is the demand for the intangible product which piggyback on the physical one. It is the fame, status or satisfaction the consumer gain from consumption. The forth expression is the price effect caused by the persuasive efforts.}$
\[ (17) \quad d|Q^* - Q^*| = \frac{\psi(f_1 - f_0)}{b} - \frac{P_1 - P_0}{b} + \delta L(T_1 - T_0) \frac{a_1 - a_2}{b} \]

To 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 \( \delta L(T_1 - T_0) \frac{a_1 - a_2}{b} \)

Proposition 5: Ignoring the marginal cost of branding \( k \) (or put differently even where \( k = 0 \)), the informational effect is finite and reaches maximum where \( T^{\text{Max}} = \min \left[ \frac{1}{2L}, \frac{L}{k} \right] \). Proof in Appendix A.

Proposition 5 means that a monotonic increase in \( T \) will “close”, at one point, the informational gap and bring to an end the informational effect 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 \( T^{\text{Max}} \), the buyer will receive all the information she needs about the physical attribute of the product. She will know that she faces \( D_1 \) rather than \( D_2 \) (assuming \( \delta = 1 \) her subjective belief will be \( \theta = 1 \)). Once full information is provided to the consumer she would move from the costly point of ignorance to \( Q = Q_C \) where her error cost are 0 (point F at Figure 3). At that point, further investment in trademark (an increase in \( T \) such that \( T > T^{\text{Max}} \)) will no longer yield any informational effect. There is no more uncertainty cost to be reduced. Thus in a world where persuasive branding is prohibited, the investment in trademarks will be finite, even when the cost of branding is zero (\( k = 0 \)).

In the case of persuasive marks, on the other hand, the producer will continue to brand above the maximum level (\( T > T^{\text{Max}} \)). This is because in reality, trademarks are not only a means to convey information about the product’s physical qualities, they also create a new product which piggybacks on the tangible one. The fame effect creates a look or signal a social status or a pleasing emotion. It is important to note, however, that 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 3 will collapse to 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 to an end at which point the two demand curves will become one. As of that point, the only two effect remaining will be the fame effect and the price effect.
This analysis explains one of the major flaws of the “soft-liners’” approach. The latter justifies persuasive branding because of its informational effect. They fail to recognize, however, that such an effect will reach an end. At a certain level of branding ($T^{\text{Max}}$) the famous trademark would convey the information the product “is a winner”. Any investment above that level does not serve any informational purpose. Thus even the “soft-liners” will side with the “hard-liners” and claim that any branding level $T$ such that $T > T^{\text{Max}}$ is wasteful. The model above, however, proves that even where the informational process ends, branding is not wasteful: it creates an intangible product which consumers value and are willing to pay for.\footnote{Part II above provides some empirical data which evidence this flaw. If, as the soft-liners argue, persuasive advertising provides only information about the physical product, we would expect a decrease in advertising outlays where the cost of advertising and the dissemination of information decrease. Yet, the data show that despite the Internet and other cost-effective mechanisms, advertising expenditures increase exponentially.}

**Proposition 6**: An increase in $T$ will unambiguously lead to an increase in both the purchased quantity, $Q^*$ and $x^{ig}$ ($Q^* > Q^*, x^{ig} > x^{ig}$) so long as $\psi > p_i - p_0$ (where $P_i$ is the new price level). Proof in Technical Appendix A.

**Corollary 6**: From proposition 7 it follows that so long as $\psi > p_i - p_0$, an increase in $T$ leads to both an increase in output and prices.

Proposition 6 and its corollary implies that when the condition specified therein holds, one may witness the anomaly of an increase in both price and output. This phenomenon has been often discussed in the literature of conspicuous goods.\footnote{The literature of “conspicuous goods” distinguishes between “Elitists” (which are defined as consumers who gain utility from the fact that other consumers cannot purchase a certain product) face an up-sloping demand curve. This line of the literature argues that an increase in price causes an increase in consumption (because fewer people can afford to buy the high-priced product, it can better serve as a signal of exclusivity and therefore is more demanded by those who can purchase it). The literature of conspicuous goods is related to the model in that it introduces social desires to the traditional consumer decision-making theory. Yet, it differs because its focus is relative consumption. The utility of elitists and conformists 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 it ignores the psychological satisfaction a product may confer. Thus, a prerequisite in that literature is that a product must be “conspicuous” to convey the message of uniqueness or conformism.} However, the conclusion of that literature is that “Elitists” (which are defined as consumers who gain utility from the fact that other consumers cannot purchase a certain product) face an up-sloping demand curve. This line of the literature argues that an increase in price causes an increase in consumption (because fewer people can afford to buy the high-priced product, it can better serve as a signal of exclusivity and therefore is more demanded by those who can purchase it). The literature of conspicuous goods is related to the model in that it introduces social desires to the traditional consumer decision-making theory. Yet, it differs because its focus is relative consumption. The utility of elitists and conformists 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 it ignores the psychological satisfaction a product may confer. Thus, a prerequisite in that literature is that a product must be “conspicuous” to convey the message of uniqueness or conformism.\footnote{See H. Libenstein, *Bandwagon, Snob, and Veblen Effects in the Theory of Consumer’s Demand*, The Quarterly J. of Economics, Vol. 64, No. 2 (May, 1950), 183-207 (defining Conformists as those who prefer...}
In any case, it cannot explain the high premiums charged by sellers of inconspicuous goods.

Figure 5: The Expected Change in Q, P as a Function of an Increase in T.

The model advanced in this paper, on the other hand, suggests that snobbism (defined as willingness to pay more for the same physical product that can be purchased for less) can occur in the traditional negatively down-sloping demand curve analysis. The model shows that under certain conditions an increase in price and output may appear simultaneously: not as a cause (increase in price) and effect (increase in output) but rather as by-products of an increase in the branding efforts. Put differently, the model shows that the increase in price and output are by-products of an increase in the branding level and that they occur in the traditional down-sloping demand curve. Intuitively, the proof can be shown by using Figures 4 and 5. Even ignoring for this matter the positive informational effect, 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.

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 new point of ignorance will unambiguously increase which implies an increase in total consumption. At a price level of P=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 is as it was initially before branding occurred. At price levels of P > P_2 the quantity may still increase but at a decreasing pace. At this point, the informational effect and the price effect are in opposite direction. The error span (and therefore the new point of ignorance) will be left to the original, which will result in a decrease in quantity absent an informational effect.

Note that d|Q_C – Q_A| = d|Q_D – Q_B| = d|Q_E – Q_F|.

177 For a relatively similar definition see Lauric, Bagwell and Bernheim, supra note 175, at p. 350 (defining Veblen Effects as “a willingness to pay a higher price for a functionally equivalent goods, arise from the desire to signal wealth”).

178 Note that d|Q_C – Q_A| = d|Q_D – Q_B| = d|Q_E – Q_F|.
of greater magnitude. If, however, the informational effect is positive and of greater magnitude than that of the price effect, an increase in consumption at a lower pace is expected. Figure 5 illustrates that at \( P > P_3 \), where the price effect is of bigger magnitude than the informational, consumption will decrease.

C. Disaggregating Informative Branding from Persuasive

As noted above, many scholars make a distinction between persuasive branding and informative branding, praising the latter and demonizing the former. The model so far assumes only one type of branding, \( T \), whose impact on both the informational and the fame effect is at the same direction. Other words, the dynamic of the model is such that every increase in \( T \) provides more information about the product’s physical qualities (illustrated by a shift of the consumer choice along the error span line) and at the same time creates a fame effect (i.e., makes the product more desirable). Thus, in its current formulation the model is incapable of describing the case in which a product is highly famous and at the same time provides fuzzy information about the product or a product which provides high level information without creating a very 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 qualities rather than on the basis of a magnetic appeal.

With a very modest modification it is possible to make a distinction between persuasive branding and informational branding. There is no need to assume that some advertisements are wholly informational while others purely emotional. Indeed, every branding effort can be often characterized as an hybrid, containing both types of advertising in different magnitude. I denote \( 0 < \alpha < 1 \) as the fragment of the branding efforts (for example a commercial) which convey information regarding 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), (8) to be:

\[
\begin{align*}
(20) \ \ \theta &= \frac{1}{2} + \delta L \alpha T \\
(21) \ \ \text{E}(e^Q^*) &= \frac{(a_1 - a_2)^2}{2b} \left[ \frac{1}{4} - \delta^2 L^2 \alpha^2 T^2 \right] \\
(22) \ \ x^* &= \frac{(a_1 - a_2)}{2b} + \frac{\delta L \alpha T(a_1 - a_2)}{b}; \quad 0 < x^* < (a_1 - a_2)/b;
\end{align*}
\]

Similarly, I define \( 0 < \beta < 1 \) as the percentage of branding efforts which appeals to consumer’s emotion and psychology. I refer to it as the level of fame. Substituting \( f \) with the function \( f = \sqrt{\beta T} \) which consistent with the requirements set above is increasing with an increase in \( T \) at the decreasing pace \( f_T > 0, f'_T < 0 \).179 This formulation yields the following outcomes:

179 Note that it may well be the case the both \( \alpha, \beta = 1 \). In such a case the branding efforts will increase both the informational and fame effects, as was the case prior to this extension of the model.
(24) \[ Q^* = Q_e + x^* = \frac{a_1 + a_2}{2b} + \frac{\psi f_{\lambda(T)} - P_{\lambda(T)}}{b} + \delta L \alpha T \frac{(a_1 - a_2)}{b} \]

\[ = \frac{a_1 + a_2}{2b} + \frac{\psi \sqrt{\beta T} - P_{\lambda(T)}}{b} + \delta L \alpha (T_1 - T_0) \frac{a_1 - a_2}{b} \]

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

\[ = \frac{\psi \beta (\sqrt{T_1} - \sqrt{T_0})}{b} - \frac{P_{\lambda(T)} - P_0}{b} + \delta L \alpha (T_1 - T_0) \frac{a_1 - a_2}{b} \]

VI. CONCLUSION

This paper offers a new rational basis for persuasive branding and anti-dilution law. It argues that, because of the state of the 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 purchase information about that product, and an image or a satisfying feeling. To build on Desmetz’ example, the orthodox Jew is willing to pay more for kosher food, because its physical characteristics (nutritional value, taste, etc.), the information it receives about a physical credence quality (a mark bearing the letter “K” informs the consumer that the process of preparation was in accord with the Jewish tradition) and a mental satisfaction (practicing a religion). These three demands are commingled.

The framework set in this article helps to clear the fog which surrounds the nebulous anti-dilution theory and 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: that the latter protects the value the former creates in a mark. Contrary to common wisdom, however, the article argues that both producers and consumers enjoy the benefit of anti-dilution law. For the producers, anti-dilution is forward looking: it protects the ability of a mark to attract new customers. For the consumer, it is backward looking: it protects the consumer investment from the hazards of an externality. Because consumers buy both a physical product and a psychological freight but gain control only over the physical product, an externality might occur. A third party may dilute the aura 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”. The analysis thus proves that anti-dilution theory cannot be christened as “a radical and imprudent alternative to the consumer protection model of trademark rights”.\(^{180}\) It also leads to the conclusion that producers should be able to command different prices for physically iden-

\(^{180}\) Klieger, supra note 23, at 795.
tical products bearing different marks without being subject to antitrust liability or inquiry. The Borden decision not only has no economic justifications, it may also thrust monopoly power upon producers and is in direct contrast to the long standing policy of defending consumers in their beliefs. Remedying this asymmetry will unambiguously lead to an increase in output and welfare—the paramount end of antitrust law. Finally, the model supports the conclusion that in certain products one may witness both an increase in price and output. This should not lead to the conclusion that one witnesses the anomaly of an up-sloping demand curve. Rather, the model shows that people are willing to pay more because they receive more and this can happen in a down-sloping demand curve.
APPENDIX A

Deriving the Error Cost—Proof of Equation (4)

To derive the error cost first solve equations (1) and (2) for $P_0$. This yields:

\[
\begin{align*}
(1.1) \quad Q_A &= \frac{a_2 - p_0}{b}, \quad Q = \frac{a_2 - p_0}{b} + x, \quad Q_C = \frac{a_1 - p_0}{b}; \\
(1.2) \quad Q_C - Q_A &= \frac{a_1 - a_2}{b}
\end{align*}
\]

Solving further equations (1) and (2) for $Q_A$ and $Q_C$ using the equations in (1.1), yields $P_F = a_1 - a_2 + P$, $P_G = a_1 - a_2 + P_0 - bx$, $P_D = P_0 - bx$ and $P_E = a_2 - a_1 + P_0$. By a simple calculation it is possible to derive the error cost for the extreme cases where $x = 0$ or $x = Q_C - Q_A$ (that is when the consumer decide to purchase $Q_A$ or $Q_C$) and the general expected error function $E(e^X)$, for $x$ as follows:

\[
\begin{align*}
(1.3) \quad E(Q_C) &= S_{ACE} = E(Q_A) = S_{FAC} = \frac{(a_1 - a_2)^2}{2b} \\
(1.4) \quad E(e^X) &= (1-\theta) \times \frac{bx^2}{2} + \theta \times \frac{(a_1 - a_2 + P_0 - bx - p_0)(\frac{a_1 - p_0}{b} - \frac{a_2 - p_0}{b} - x)}{2} \\
\end{align*}
\]

rearranging equation (1.4) yields:

\[
\begin{align*}
(4) \quad E(e^X) &= \frac{bx^2}{2} - \theta(a_1 - a_2)x + \frac{\theta(a_1 - a_2)^2}{2b}
\end{align*}
\]

Figure 1: The Expected Cost Due to Uncertainty
Proof of Proposition 1

The proof of proposition 1 is straightforward. From equation (5) 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 $Q_A < Q^* < Q_C$. Recall from equation (1.2), that: $(a_1 - a_2)/b = Q_C - Q_A$. Because the quantity $x^*$ chosen by the buyer (see equation (5)) is that difference times the probability of error, $\theta$, and because $0 < \theta < 1$, it follows that $Q_A < Q^* < Q_C$.

Proof of Equation (6) and Corollary 1

To derive equation (6), I substitute $x^*$ in equation (5) for $x$ in equation (4) and after rearranging that expression I receive the minimized expected error cost:

$$E(e^{x^*}) = \frac{(a_1 - a_2)^2}{2b} - [\theta - \theta^2]; \text{ or } E(e^{x^*}) = \frac{(a_1 - a_2)^2}{2b} - [\theta(1 - \theta)]$$

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 $Q_C$. From equations (4) and (1.2) it can be shown that where the consumer chooses $x = 0$ (that is $Q_A$) or $x = Q_C - Q_A = (a_1 - a_2)/b$ the respective error cost are:

$$(\text{III.1}) \ E(Q_A) = \theta(a_1 - a_2)^2/2b; \text{ and}$$  
$$(\text{III.2}) \ E(Q_C) = (1 - \theta)(a_1 - a_2)^2/2b.\$$

The two expressions are equal and at maximum, however, where $\theta = 0, 1$ respectively. Because $0 < \theta < 1$ it 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: $0 < E(e^{Q^*}) < E(e^{Q_A}) = E(e^{Q_C})$.

181 Equation (5) is the first order condition of the error function in equation (4): $\frac{dE(e)}{dx} \Rightarrow $  
$x^* = \frac{\theta(a_1 - a_2)}{b} > 0$

182 The second order condition of the error function in equation (4) is $\left(\frac{dE(e)}{dx}\right)_{dx} = b > 0$. 
**Proof of Proposition 2**

The proof of proposition 2 follows directly from equation (6).

**Proof of Proposition 3**

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

**Proof of Proposition 4**

Proposition 4 is derived directly from equation (8). Because the error cost contains the expression $\delta^2$, an increase in $T$ will decrease the error cost regardless of whether $\delta = 1$ or $\delta = -1$.

**Proof of Equations (10), (13)**

Max $E$

$$P_L = a_1 + \psi \eta - bQ_A = a_1 + \psi \eta - b \frac{a_2 + \psi \eta - P_1}{b} = a_1 + \psi \eta - a_2 - \psi \eta + P_1$$

$$P_L = a_1 - a_2 + P_1 - P_1 = a_1 - a_2$$

$$P_L - P_1 = a_1 - a_2 + P_1 - P_1 = a_1 - a_2 \text{ (alternatively, see graph)}$$

Max $E' = S_{L_E} = \frac{(P_L - P_1)(Q_F - Q_{F'})}{2} = \frac{a_1 - a_2}{b} \frac{a_1 - a_2}{2} = \frac{(a_1 - a_2)^2}{2b}$

53
The Error Function

\[ E(e) = (1 - \theta) \frac{x(P_1 - P_P)}{2} + \theta \frac{(Q_P - Q_E - x)(P_N - P_1)}{2}; \quad x = Q_1 - Q_E \]

\[ P_P = a_z + \gamma f - b(Q_E + x) = a_z + \gamma f - b \left( \frac{a_z + \gamma f - P_1}{b} + x \right) = P_1 - bx \]

\[ P_N = a_i + \gamma f - b \left( \frac{a_z + \gamma f - P_1}{b} + x \right) = a_i - a_z + P_1 - bx \]

\[ P_1 - P_P = bx \]

\[ P_N - P_1 = a_i - a_z - bx \]

\[ E'(e) = (1 - \theta) \frac{bx^2}{2} + \theta \frac{(a_i - a_z) - x(a_i - a_z - bx)}{2} = \frac{bx^2}{2} - \theta(a_i - a_z)x + \frac{\theta(a_i - a_z)^2}{2b} \]

**Proof of Proposition 5**

A condition for the occurrence of private branding is that \( \delta = 1 \). That is, the mark must convey “positive” information/image about the products’ credence qualities. But this condition, albeit necessary, is not sufficient. Because branding is not costless, another necessary condition is that the producers’ costs from branding, denoted by \( K \), is less or equal (but not higher) than the benefits from branding. Simply put, producers will brand only if the additional profit from a unit of trademark are higher than its cost. More formally, a producer’s decision to invest in a trademark can be presented as follows:

\[ \Delta \pi = \delta LT \frac{(a_i - a_z)}{b} (P_0 - c) \geq KT^2 \]

Where \( d\Pi \) is the additional profits from branding, \( \delta LT(a_i-a_z)/b \) is the additional quantity manufactured due to an increase in \( T \) (see equation (11)), \((P_0-c)\) is the markup over production and \( B = KT^2 \) is the cost of branding. I assume that the cost of branding is positive for every \( T \) (\( B' > 0 \) which implies \( K > 0 \)) and increasing (\( B'' > 0 \)). The assumption fits to real life situations where the stronger and more well known a trademark is, the higher is the marginal investment that is required to increase the trademark strength in one more unit \((T + 1)\). Under this formulation it is possible to derive the optimal investment in \( T \), by differentiating equation above with respect to \( T \):

\[ \frac{d\Delta \pi}{dT} = \delta L \frac{(a_i - a_z)}{b} (P_0 - c) - 2KT; \]

\[ \frac{d\Delta \pi}{dT} = 0 \Rightarrow T^* = \frac{\delta L(a_i - a_z)(P_0 - c)}{2bK} = L \frac{(a_i - a_z)}{2b} \frac{(P_0 - c)}{K} > 0 \]

\[ \frac{d\pi}{dT} \bigg|_{t^*} < 0 \]
Proof of Proposition 6

(15) \[ Q^* = Q_A + x^* = \frac{a_1 + a_2 - 2\bar{P}_0}{2b} + \delta L T \frac{(a_1 - a_2)}{b} \]

(16) \[ Q^* = Q_E + x^* = \frac{a_1 + a_2 - 2\bar{P}_0}{2b} + \delta L T \frac{(a_1 - a_2)}{b} + \left( \frac{\psi f(T) - p_{1(T)} - p_0}{b} \right) \]

It is possible to see that the difference in \( Q \), is the third expression (in brackets) in equation 16. \( Q^* - Q^* > 0 \) if \( \frac{\psi f(T)}{b} > \frac{p_{1(T)} - p_0}{b} \). Because \( b > 0 \) the condition can be reformulated as \( \psi f > p_1 - p_0 \).

The Error Function and Distinctiveness

(6) \[ E(e^{x^*}) = \frac{(a_1 - a_2)^2}{2b} \left[ \theta - \theta^2 \right] \]; or

(20) \[ \theta = \frac{1}{2} + \delta L \alpha T \]

(21) \[ E(e^{x^*}) = \frac{(a_1 - a_2)^2}{2b} \left[ \frac{1}{2} + \delta L \alpha T - \left( \frac{1}{2} + \delta L \alpha T \right)^2 \right] \]

\[ = \frac{(a_1 - a_2)^2}{2b} \left[ \frac{1}{4} - (\delta L \alpha T)^2 \right] \]

(21a) \[ \frac{dE}{d\alpha} = -2\alpha T^2 \delta^2 L^2 \frac{(a_1 - a_2)}{2b} < 0; \left( \frac{dE}{d\alpha} \right) d\alpha < 0 \]

(25) \[ d|Q^* - Q^*| = \frac{\psi f(T) - \psi f_0}{b} - \frac{p_1 - p_0}{b} + \delta L \alpha(T_1 - T_0) \frac{a_1 - a_2}{b} \]

\[ = \frac{\psi \sqrt{\beta T_1} - \psi \sqrt{\beta T_0}}{b} - \frac{p_1 - p_0}{b} + \delta L \alpha(T_1 - T_0) \frac{a_1 - a_2}{b} \]

\[ = \frac{\psi \sqrt{\beta(T_1 - \psi T_0)}}{b} \]

Readers with comments should address them to:

Mr. Shahar Dilbar
John M. Olin Scholar in Law and Economics
University of Chicago Law School
1111 East 60th Street
Chicago, IL  60637
sdilbary@uchicago.edu

183 Like Landes and Posner (2003) I assume that the manufacturer is a price taker and thus the change in production does not influence the market price \( P_0 \).
For a listing of papers 1–174 please go to Working Papers at http://www.law.uchicago.edu/Lawecon/index.html

181. Amitai Aviram, Regulation by Networks (March 2003)
194. David A. Weisbach and Jacob Nussim, The Integration of Tax and Spending Programs (September 2003)
200. Douglas Lichtman, Rethinking Prosecution History Estoppel (October 2003)
201. Douglas G. Baird and Robert K. Rasmussen, Chapter 11 at Twilight (October 2003)
205. Lior Jacob Strahilevitz, The Right to Destroy (January 2004)
208. Richard A. Epstein, Disparities and Discrimination in Health Care Coverage; A Critique of the Institute of Medicine Study (March 2004)
209. Richard A. Epstein and Bruce N. Kuhlik, Navigating the Anticommons for Pharmaceutical Patents: Steady the Course on Hatch-Waxman (March 2004)
213. Luis Garicano and Thomas N. Hubbard, Specialization, Firms, and Markets: The Division of Labor within and between Law Firms (April 2004)
216. Alan O. Sykes, The Economics of Public International Law (July 2004)
225. Christine Jolls and Cass R. Sunstein, Debiasing through Law (September 2004)
228. Kenneth W. Dam, Cordell Hull, the Reciprocal Trade Agreement Act, and the WTO (October 2004)
230. Lior Jacob Strahilevitz, A Social Networks Theory of Privacy (December 2004)
231. Cass R. Sunstein, Minimalism at War (December 2004)
238. Randal C. Picker, Copyright and the DMCA: Market Locks and Technological Contracts (March 2005)
239. Cass R. Sunstein and Adrian Vermeule, Is Capital Punishment Morally Required? The Relevance of Life-Life Tradeoffs (March 2005)
240. Alan O. Sykes, Trade Remedy Laws (March 2005)
250. Lior Jacob Strahilevitz, Exclusionary Amenities in Residential Communities (July 2005)
255. David A. Weisbach, Paretian Intergenerational Discounting (August 2005)
257. Adrian Vermeule, Absolute Voting Rules (August 2005)
258. Eric Posner and Adrian Vermeule, Emergencies and Democratic Failure (August 2005)
260. Adrian Vermeule, Reparations as Rough Justice (September 2005)
262. Adrian Vermeule, Political Constraints on Supreme Court Reform (October 2005)
264. Lior Jacob Strahilevitz, Information Asymmetries and the Rights to Exclude (November 2005)
265. Cass R. Sunstein, Fast, Frugal, and (Sometimes) Wrong (November 2005)
<table>
<thead>
<tr>
<th>Page</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>266.</td>
<td>Robert Cooter and Ariel Porat, Total Liability for Excessive Harm (November 2005)</td>
</tr>
<tr>
<td>273.</td>
<td>Cass R. Sunstein, Burkeman Minimalism (January 2006)</td>
</tr>
<tr>
<td>274.</td>
<td>Cass R. Sunstein, Misfearing: A Reply (January 2006)</td>
</tr>
<tr>
<td>275.</td>
<td>Kenneth W. Dam, China as a Test Case: Is the Rule of Law Essential for Economic Growth (January 2006)</td>
</tr>
<tr>
<td>276.</td>
<td>Cass R. Sunstein, Problems with Minimalism (January 2006)</td>
</tr>
<tr>
<td>278.</td>
<td>Elizabeth Garrett and Adrian Vermeule, Transparency in the Budget Process (January 2006)</td>
</tr>
<tr>
<td>282.</td>
<td>Douglas G. Lichtman, Defusing DRM (February 2006)</td>
</tr>
<tr>
<td>284.</td>
<td>Adrian Vermeule, The Delegation Lottery (March 2006)</td>
</tr>
<tr>
<td>285.</td>
<td>Shahar J. Dilbary, Famous Trademarks and the Rational Basis for Protecting “Irrational Beliefs” (March 2006)</td>
</tr>
</tbody>
</table>