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THE PSYCHOLOGICAL FOUNDATIONS OF TRADEMARK LAW:
SECONDARY MEANING, GENERICISM, FAME, CONFUSION AND DILUTION

By Jacob Jacoby*

I. INTRODUCTION

Several years prior to enactment of the Lanham Act, Supreme Court Justice Felix Frankfurter wrote: "The protection of trademarks is the law's recognition of the psychological function of symbols."¹ Fifteen years earlier, Frank I. Schechter, defined dilution in his famous Harvard Law Review article as "the gradual whittling away or dispersion of the identity and hold upon the public mind of the mark or name by its use upon non-competing goods."² No less an authority than Professor J. Thomas McCarthy has asserted: "However, secondary meaning is a fact only in the sense that the state of a buyer's mind is a fact."³ In like fashion, Richard Kirkpatrick has written: "trademarks are intellectual or psychological in nature. It follows that the question of trademark infringement is primarily one of the psychology—cognitive and behavioral—of consumers. A mark infringes when it is likely to cause a mental state of confusion in an appreciable number of consumers."⁴

Without question, United States trademark law focuses upon consumer psychological states of mind and processes. Specifically, the Lanham Act prohibits any marketplace entity from engaging in an act that "is likely to cause confusion, or to cause mistake" or cause "deception" or "dilution" in the minds of the relevant consuming public. Similarly, trademark concepts such as "acquired distinctiveness" ("secondary meaning"), "fame" and "genericide" are based on the meanings and associations residing in the minds of the relevant public.

Though United States trademark law focuses on mental states and processes, those who provide counsel, litigate or adjudicate cases in this area of law, for the most part, have little or no formal training in the social sciences, particularly in psychology and its most relevant sub-disciplines, cognitive and consumer psychology. The scholarly literature in these disciplines has, for the greater part, remained unexamined. Yet, despite being "esoteric," this literature has much to offer those interested in trademark law and is directly in keeping with views expressed on the first page of the Federal Judicial Center’s Reference Manual on Scientific Evidence:

Increasingly, . . . the issues coming before the courts are more esoteric and complex. As a result, the resolution of such issues has become more dependent on the help of experts. No longer can judges and jurors rely on their common sense and experience in evaluating the testimony of many experts. . . . The challenge the justice system faces is to adapt . . . to deal with this kind of evidence fairly and efficiently and to render informed decisions."15

In line with these views, this article is designed to provide those in the legal profession with a basic understanding of pertinent thought and findings from cognitive and consumer psychology and to explain their impact on the application of United States trademark law. The second part of this article adumbrates the psychological foundations underlying much of trademark law. The third part applies these foundations to the concepts of acquired distinctiveness and fame, while the fourth part does the same for the concepts of confusion and dilution. As a point of departure, consider the following questions:

1. Regardless of how much and what a person knows, how is everything that is known (which includes knowledge regarding products, brands, and companies) stored in memory?

2. Only a minute fraction of everything known is consciously available to a person at any given moment in time. What is the process by which the known things are retrieved from memory?

3. What is the relationship between the information stored in our memory and the process by which information from the outside world is perceived, interpreted and given meaning?

II. PSYCHOLOGICAL FOUNDATIONS: THE INDIVIDUAL'S "COGNITIVE SYSTEM"

The trademark law concepts of acquired distinctiveness (secondary meaning), genericide, fame, confusion, and dilution may be better understood in light of the following psychological concepts and summary statements:

A. Immediate Consciousness versus Memory

At the outset, it is important to distinguish between consciousness of the moment (sometimes referred to as the "cognitive workspace") and memory. Individuals have an incredible amount of information regarding an equally vast number of topics crammed into their minds. These include thoughts regarding, for example, their childhood, clients, thoughts about sofa fabrics, wall colors and styles for summer suits, vacations taken in the past, and dreams about vacations to be taken in the future, certain people (our spouse, family doctor, clergyman, boss, a particular federal judge), television shows and celebrities, animals (such as the family pet and the sharks we know dwell in the deep blue sea), sports teams (the Green Bay Packers) and hotels (the Four Seasons). The list of what an individual knows is endless.

Yet, only a very small fraction of a person's knowledge and past experience is present in "consciousness of the moment." All the other information that we each have but are not thinking about at that particular moment (for example, our mother's maiden name—something generally not "uppermost" in our mind), is stored in "memory." Memory is fundamental and essential. As Hunt and Ellis have observed:

Memory is the heart of human intellectual functioning and, consequently, is involved in all processes from perception to reasoning . . . [I]magine life without memory . . . Without

6. "Information" includes not only alphanumeric or semantic information (such as our mother's maiden name and the year in which Christopher Columbus discovered the Americas), but also visual images, sounds, aromas, experiences and feelings.
memory, you would be completely incapacitated in the working world, unable to function in even the simplest situation and unable to communicate coherently with you colleagues . . . your social life would be non-existent . . . because you would not be able to recall a person or anything about that person from one encounter to the next. Most devastating would be the lack of personal identity or self concept. With no memory for prior personal experience. . . . You literally would confront a stranger in the mirror. 

The fact that we are able to are able to store information in memory does not mean that it is readily available or accessible. Some information can be easily retrieved on an instant’s notice, while retrieving other information (the name of a particular person we knew in high school, the name of a movie we saw years ago) may be accomplished only after considerable effort. Yet other information (the name of a particular teacher we had in grade school) may be completely inaccessible. In other words, the information in memory ranges from the “virtually always available to be accessed into consciousness” to the deepest recesses of “virtually unavailable to be accessed into consciousness.”  

8. Parenthetically, this “accessibility of stored information” continuum has important implications when seeking to measure mental contents. Readily accessible stored information may be retrieved via open-ended (unaided recall) questions. However, retrieving less readily accessible stored information generally requires using either “focused” open-ended (aided recall) questions or closed-ended (recognition) questions. Despite the mistaken impressions of some courts, properly worded closed-ended questions are not inherently leading. As examination of the most rigorous peer reviewed scholarly journals across the social and behavioral sciences reveals, more so than open-ended questions, closed-ended questions provide a fundamental methodological cornerstone for scientific research in political science, psychology, sociology, organizational behavior, management, marketing, communications, to mention but a few. Moreover, closed-ended questions are used routinely and in vast numbers in government and industry to gather information and as a basis for reaching decisions of great consequence. For example, closed-ended questions constitute the vast majority of the questions asked in the United States Census. Exceptionally influential in Federal Reserve deliberations and other government planning, the Index of Consumer Sentiment is based entirely on the answers to closed-ended questions (eg, “We are interested in how people are getting along financially these days. Would you say that you are better off or worse off financially than you were a year ago?”). Despite the fact that these questions necessarily “plant” ideas in the minds of respondents, the question remains whether these closed-ended questions are necessarily leading or suggestive? As they do not indicate which of the answers is the “desired” answer, it is submitted they are not. The physician who relies solely on the information gathered from asking “How do you feel?,” without following this up with pertinent closed-ended questions, likely would be considered a poor diagnostician and irresponsible physician. One is led to wonder whether those courts indicting closed-ended questions had ever completed medical inquiry forms, forms to purchase life insurance, a car or a home or taken a multiple-choice exam, including the LSAT (“The Law School Admission Test is a half-day-long standardized exam that is required for admission to all law schools approved by the American Bar Association. . . . It consists of six separately timed sections, five of which use multiple choice questions.” T. M. Martinson, Everything You Need to Score High on the LSAT ARCO, p 5 (2000 ed).
Various analogies exemplify these concepts. For example, a person's immediate consciousness (or "cognitive workspace") can be likened to a desk, whereas memory can be likened to an extensive bank of file cabinets, drawers, and bookshelves that grow in number as life is experienced. When working on a project, the individual cannot possibly place all the contents of these drawers, file cabinets, and bookshelves onto her desk at the same time. Instead, she goes to those cabinets, drawers, and shelves she thinks contain the pertinent materials, retrieving and placing onto her desk those items she thinks are germane. Similarly, a person's consciousness of the moment is like a desktop that can only accommodate a very limited amount of the information available in all her storage bins.

An even more popular analogy likens the operation of the human mind to that of a computer. Like the neuro-electric biochemical structure of the mind, even the simplest computer has the capacity to store a considerable amount of information on its magnetic, electro-mechanical hard drive. The hard drive is the computer's memory store. These days, the capacity of this memory system is measured in ever-increasing units called gigabytes, which represent one billion separate "bits" (zero/one binary digits) of information.

Despite blazing speeds that permit information to be called forth virtually instantaneously and the significant restrictions imposed by the hardware upon the ability to open window upon window of information, it is impossible to provide all the information contained on the hard drive in the computer's memory at the same time. One restriction is imposed by the capacity of the computer's Random Access Memory ("RAM"). RAM may be likened to the neck of a soft-drink bottle. Just as the "bottleneck" permits only a limited surface area of the fluid to be exposed and limits the flow at any given moment, RAM limits the amount of information that can be retrieved from the computer's hard drive memory at any point in time.

The bottom line is that, in their normal course of business—a concept important enough to be incorporated in Federal Rule of Evidence 703—industry, governments, educators, consumer and market researchers, and pollsters primarily rely on closed-ended questions when assessing the contents of respondents' minds. The accessibility of memory contents continuum requires the use of closed-ended questions. Thus, it is submitted that those who inveigh against properly constructed closed-ended questions have no scientifically legitimate basis for rendering such opinions.

9. For example, in introducing the term cognitive science, The New York Times said: "In the last few decades, scientists in a variety of fields, including psychology, have harnessed concepts from computer science to understand how people take in information, process it and use it to solve problems." Erica Goode, Human Nature: Born or Made? F1, The New York Times, March 14, 2000.
The limitations imposed by the video monitor display are even greater because, at any given instant, no more than a minute fraction of the vast amount of information stored in the computer may be displayed. This limitation is a boon rather than a bane, because the human mind cannot absorb all the information in the computer at the same time. Our mental (or "cognitive") systems would "blow a fuse" from a severe case of information overload. Thus, if the hard drive may be likened to the memory store, then the video monitor may be likened to the cognitive workspace.

To summarize the points covered so far:

1. Everything we know is stored somewhere in our memory;
2. It is useful to think of memory as consisting of two components—a cognitive workspace (our consciousness of the moment) and long term memory (the storehouse of our past experiences and knowledge); and
3. At any given instant, because of the limitations inherent in our cognitive systems, we can only be conscious of an exceedingly small proportion of what we know.

**B. Cognitive Networks: The Filing Systems of the Mind**

Computers store information as a binary series of code activated via magnetic charges. For example, according to the American Standard Code for Information Exchange ("ASCII"), the letter "Y" is represented by the eight-bit sequence 10111001. But how is information stored in human memory? Since the mid-1970s, the most widely accepted view among scholars is that information is stored via a vast array of interlocked "cognitive networks," each consisting of "nodes" and "links." Nodes are

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10. The individual's consciousness of the moment is overloaded by too much information retrieved from memory. Later, strategies that the consumer employs to avoid being overloaded by information coming into the cognitive workspace from the outside world will be discussed.


meanings (either semantic, pictorial and auditory)\textsuperscript{13} or feelings; “links” represent the routes by which these meanings interconnect. Links are the mental associations or connections between different items of information (nodes) stored in the mind. Links vary in strength. When depicted in visual form, stronger links are usually indicated by thicker lines.

To the three points summarized above, we now add:

4. Information and experiences are stored in memory as “cognitive networks” consisting of nodes (elements of information) and links (mental associations) between nodes.

Assume for now that each cognitive network can be visualized as an interconnected Tinker-Toy\textsuperscript{®} consisting of a large number of wheels connected by spokes, with some wheels having more connecting spokes than others. To illustrate, suppose someone was asked to think about his family. He might begin by thinking of his mother (a node) and then to thinking of his mother’s two brothers, first Bill (a second node), then Hal (a third node), then, maybe, his mother’s and two brother’s mother, also his grandmother (another node). This process is called “spreading activation.”

Thus, an additional summary statement is as follows:

5. Though psychological and neurological research reveals a certain amount of “parallel processing” (i.e., bunches of nodes lighting up all at once), most thinking, including the process of retrieving knowledge from memory, is essentially a sequential phenomenon. Through the process known as “spreading activation,” one thought (node) leads to and activates the next thought (node).

Thinking is multi-linked and multi-directional. In other words, there are many ways to get from here (thinking of your mother) to there (thinking of your grandmother). Spreading activation forms the basis of inference making.\textsuperscript{14} (Sometimes, the inference drawn may be incorrect,\textsuperscript{15} as occurs, for example, in the context of false advertising claims.) Thinking does not always proceed in a formal linear fashion, but, rather, more often proceeds in an informal, psychological process. Hoyer and MacInnis\textsuperscript{16} provided the follow-

\begin{thebibliography}{9}
\bibitem{} 13. To appreciate that meanings may be stored visually or acoustically, the reader only has to call to mind the appearance of his office or desk, or the first four notes of Beethoven’s Fifth Symphony.
\end{thebibliography}
ing easy-to-understand description of activation and spreading activation:

We can think about activation [of a node] as a light going on. Whether a light goes on or not depends on whether sufficient electricity is delivered to it. Likewise, whether a node in memory is activated depends on how much prompting it receives, or its level of activation.

The basic principle of spreading activation . . . is that when a particular node is activated, some of this activation (energy) will spread to adjacent nodes. If the activation level is sufficient, the other nodes may be retrieved [i.e., brought forth into memory] as well.

Advances in neuroscience have confirmed the validity of the notion of spreading activation. More than two decades ago, Mountcastle discovered that the neurons of the cerebral cortex are arranged so that the output from one neuron is transmitted simultaneously to numerous other neurons, as opposed to from one neuron to another. More recently, a committee of the National Research Council reported:

Positron emission tomography (PET) and functional magnetic resonance imagery (MRI) literally show that the mind does not follow a single “train of thought,” but rather that thinking happens in neural networks, or sets of coordinated but simultaneous neural events in relatively small, sometimes widely separated areas of the brain (Druckman & Lacey, 1989; Posner & Raichle, 1994). We can see in the brain that the mind is not a passive receptacle for ideas, but an active constructor of sensations, patterns and meanings.

Several of these concepts lie at the heart of determining whether a likelihood of confusion exists—the critical issue in trademark litigation. Testimony regarding cognitive networks and spreading activation assisted the district court in finding for plaintiff in Mead Data Central Inc. v. Toyota Motor Sales, U.S.A., Inc., a finding which was reversed on other grounds by the Second Circuit. More recently, in a lawsuit involving the “Baltimore Colts” mark, Judge McKinney took note of the process of spread-

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ing activation, commenting as follows: "Plaintiff's expert's explanation . . . is appealing. He explained the way in which the human brain stores and retrieves memory, pointing to articles on cognitive networks and spreading activation."20

Further, as noted by Hunt and Ellis, "The idea of spreading activation implies that sub-threshold activation accumulates in the nodes related to the activated node. Essentially, this means that the activity of thinking about one thing automatically and unconsciously influences the status of other things."21 As opposed to being mediated by conscious choice or reflection, most psychological phenomena (including how we perceive and interpret information in the outside world) are essentially automatic and subconscious in nature.22 As more fully discussed below, this principle has important implications with respect to the issues of trademark confusion and dilution. Thus, our next summary statement is as follows:

6. Spreading activation occurs automatically and subconsciously.

As noted above, the manner in which the members of a person's family are recalled from memory, generally, does not correspond to a formal linearly organized family tree. Depending upon a variety of factors, certain family members (each represented by a node in a person's "my family" cognitive network) may be called to mind "out of order." For example, though close with his first cousin Stan, because Stan's son, Len, practices intellectual property law and lives in the neighborhood and visits often, it is more likely that this author will think first of his second-cousin Len, then his first-cousin Stan, rather than the reverse. This leads to a seventh summary statement:

7. Though sequential, thinking is not necessarily linear nor to the outside world, logical. Influenced by many internal and external factors, it is psychological.

Moreover, as each family member is called to mind, various images, attributes and feelings associated with that individual are triggered. Some may be pleasant; others less so. Thus, another summary statement is:

8. The activation of an informational node may call to mind related nodes consisting of related thoughts, feelings, evaluations, images and moods.

21. Hunt and Ellis, supra note 7 at 193.
The human mind, however, is not able to cope with the simultaneous presentation of all this information. Even if we limit attention to a single cognitive network (e.g., her mother’s family), it is impossible to keep every known thing regarding that topic in one’s mind at the same moment. The next summary statement, thus, provides:

9. Because of “information overload,” the amount of information any person can consider, much less evaluate, at any one point in time is severely limited.

Last, when one considers all the things individuals know and the feelings and evaluations individuals have about each of the various topics crammed into individuals’ minds, it becomes readily apparent that the adult human mind likely contains millions, perhaps even tens of millions, of nodes and links. Truly, it qualifies as a complex system. Emerging research on complex systems—as varied as the metabolic networks of life-sustaining chemical reactions inside cells, the species in an ecosystem such as a fresh water lake, the web of power systems forming the electrical grid of the Western United States, the Internet and the World Wide Web—suggests that complex systems may all conform to the same organizational principles.

As they come together, many networks seem to organize themselves so that most nodes have very few links, and a tiny number of nodes, called hubs, have many links. The pattern can be described by what scientists call a power law. . . . As the number of connections [to a node] rises, [there will be fewer such multi-connected nodes in the system].

In a highly publicized paper in 1998, Dr. Duncan Watts, a sociologist at Columbia University, and Dr. Steven Strogatz, an applied mathematician at Cornell University, found that many networks exhibited . . . the small-world phenomenon popularized in John Guare’s play “Six Degrees of Separation.” Just as any two people can be linked by a chain of . . . [approximately] six acquaintances, so can any node in a small-

world network be reached from any other node with just a few hops.

The World Wide Web is a small world. . . . Any two documents or sites on the Web are separated by only a small number of mouse clicks.24

As a complex "small world" system, each adult human mind operates in similar fashion. To illustrate, consider how one retrieves memories of people known and events experienced years ago, and how retrieval of one item of information generally leads to retrieval of related items. Especially consider how some retrieved items (e.g., hearing the name of our best friend in grade school whom we have not seen in thirty years) is capable of evoking linkages to many more items than is hearing the name of some minor acquaintance from the same period. This leads to another summary statement:

10. In terms of their linkages with other nodes, some nodes in our mental systems (termed “hubs” or “core” nodes) are more important than are others.

C. Cognitive Networks
as They Apply to the Marketplace

These cognitive processes also apply to the way in which the name of a company, its product, its brand and the brand attribute information are stored in memory.25 To illustrate, suppose a consumer was thirsty and wanted to have a beer. Thinking of beer might first activate the “Budweiser” node then “Bud Light” → “Anheuser-Busch” → the “City of St. Louis” → “Michelob” → “Heineken” → “a billboard ad showing a cold Heineken covered in condensation” → “Amstel” → “imported beer” → “Becks” → “Coors” → “Colorado” → “the Rockies” → “Hamms.”

Thinking of a manufacturer (Anheuser-Busch) also may lead to thinking of other items from the same source, including other brands of beer (Busch®; O’Doul’s®) and related products (the “A-and-Eagle” brand of salted nuts). Further, the consumer may be prompted to think of some of the recalled beers as possessing


25. As examples, see illustrations and related discussions in Hoyer and MacInnis, supra note 16 at 169; J.P. Peter and J.C. Olson, Consumer Behavior and Marketing Strategy, 68 (6th ed 2002).
common or similar attributes (most are domestic, others are imported; some are high-priced, others low-priced) or as having unique attributes (the highly distinctive design of the Budweiser® container or the distinctive combination and shades of green, white and red star used on the Heineken® label). Moreover, thinking of any one of these items may evoke related feelings and evaluations, such as, St. Louis is a nice place to live or the last time I had a Heineken® it tasted bitter.

D. The Role Played by Brand Names and Other Source-Identifying Indicia in Information Retrieval

A product’s price usually is one of the most important items of information for any consumer contemplating a purchase. With only price information, however, the consumer typically can tell us relatively little about the product. For example, suppose a consumer is asked: “I’m thinking of a particular beer that costs around $4.95 a six-pack. What can you tell me about that beer?” The consumer would be unable to tell much about the beer beyond price. He would not be able to tell whether the beer was domestic or imported, the name of the manufacturer and what other items were manufactured by the same source. Thus, information regarding a product’s price, while important, typically enables the consumer to make only general inferences. In most instances, important to the consumer as it may be, price information alone does not foster identification of the specific brand.

Suppose, instead, the consumer is asked: “I’m thinking of a particular beer. Its name is Budweiser®. What can you tell me about that beer?” Most adult Americans (even many who do not buy or drink beer) might be able to provide a great deal of information, including: (1) the approximate price; (2) the name of the manufacturer; (3) other brands of beer made by that same source; (4) the fact that it is “beechwood aged”; (5) that it comes in containers with labels bearing a distinctive red and white logo; (6) that it is the most popular beer in the country; (7) that it goes by the nickname “Bud” and uses the slogan “This Bud’s for you”; (8) that there is also a Bud Light version; (9) that a series of “Bud Bowl” commercials broadcast in conjunction with the Super Bowl have depicted a football game played between teams composed of bottles of Bud and Bud Light; and (10) that Clydesdale horses are used in its advertising, especially during the Christmas season.

Thus, brand names serve as information “chunks.” They represent core nodes in memory around which other “associated” information is connected and organized. Given only a familiar brand name, a host of relevant and important information can be
efficiently called into consciousness. Although developed primarily to illustrate points discussed in subsequent sections, the reader is encouraged to examine Exhibit 1 which, by way of an illustration, endeavors to make these abstract concepts more concrete.

A unique brand name and cohesive brand identity are probably the most powerful pieces of information for consumers. They serve as “information chunks,” enabling the consumer to efficiently organize, store, and retrieve information from memory. Indeed, when consumers engage in pre-purchase decision-making, brand name information tends to be the most frequently accessed type of information.

“Chunking” often operates virtually effortlessly and goes unnoticed in most circumstances. At other times, though, effort is required to learn and store a chunk. Such effort, however, may yield great dividends. Consider the following 11-digit sequence: 1-2-1-2-7-6-8-9-8-8-7. When viewed in isolation, a person might have difficulty remembering these digits. When the numbers are divided into smaller units, however, remembering becomes easier. For example, grouping these 11 numbers into the familiar 1 digit, 3 digit, 3 digit, 4 digit pattern used for long distance phone numbers makes it easier to commit the sequence to memory (1-212-768-9887). The task becomes easier still when the number, by being associated with something already in stored memory, is accorded meaning (that is the telephone number of The International Trademark Association). The process whereby new information is added to existing cognitive networks is termed “accretion.”

“Chunking” applies to more than just names and numbers. It also applies to logos (a “swoosh” or a horseman on a pony holding an upraised polo mallet), shapes (the classic Coca-Cola bottle), colors (the colors green and yellow in the context of NFL football),

26. Much else can be said regarding the value and function of brand names, particularly as these come into play in the service of creating “brand equity” for the source (eg, D.A. Aaker, Managing Brand Equity (1991); D.A. Aaker, Bulilding Strong Brands (1996)), and “brand loyalty” for the consumer (eg, J. Jacoby and R.W. Chestnut, Brand Loyalty: Measurement and Management (1978)). Considerable research also exists to show that, consistent with legal theory, consumers rely heavily upon brand names to arrive at judgments of quality (cf J. Jacoby, J.C. Olson and R.A. Haddock, Price, Brand Name and Product Composition Characteristics as Determinants of Perceived Quality, 55 Journal of Applied Psychology 570-79 (1971); G.J. Szybillo and J. Jacoby, Intrinsic v. Extrinsic Cues as Determinants of Perceived Quality, 59 Journal of Applied Psychology 274-80 (1974)).

27. As described later, information chunks also play an important part in the interpretation of information incoming from the outside world.


29. See Peter and Olson, supra note 25 at 61.
sounds (the pocketa-pocketa-pocketa of a Harley-Davidson motorcycle), aromas, or any other uniquely identifying indicia.

What makes chunking so important is that, once a distinctive node has been activated in memory, via the process of spreading activation, one is generally able to activate and retrieve many other nodes from that network. Thus, Nike's "swoosh" symbol—originally nothing more than a stylized check-like mark that likely required a number of exposures before it stood for something in a consumer's mind—is now able to operate as a distinctive node and is as effective in evoking clusters of related knowledge as the name "Nike" itself.

E. A "Not Insubstantial" Proportion of Consumers

Trademark law concepts, such as acquired distinctiveness, fame, genericism, confusion, and dilution are not, however, applied to the contents of a single person's mind. Rather, they apply to aggregates of people, typically, the universe of purchasers and prospective purchasers of the particular product or service at issue. From the perspective of trademark law, the critical point is that, as a result of having been exposed to the same products (Coca-Cola), advertisements and experiences (the movie Gone With The Wind), many individuals develop cognitive networks regarding the same item that possess many nodes in common. For example, the name "Babe Ruth" causes many people to activate nodes such as "baseball legend," "New York Yankees," "60 home runs in one season." Others with more knowledge or experience in this realm may also think "Sultan of Swat," "beefy face and physique," "once a pitcher for the Boston Red Sox" or "enshrined in Cooperstown." It is not that every consumer will have exactly the same nodes organized in exactly the same way, just that their respective cognitive networks will contain many of the same nodes organized in similar ways.

From this example, two additional summary points emerge:

11. By virtue of exposure to common stimuli and shared experiences (due, in part, to the media or advertising), many individuals in a given society or culture will have cognitive networks that possess many common nodes; and

12. Cognitive networks generally contain one or more "distinctive" nodes, defined as a node that, by itself, is sufficient to elicit substantial portions of the relevant cognitive network from memory.
Thus, hearing the term "Sultan of Swat" may be equally as effective as the name "Babe Ruth" in evoking an individual's "Babe Ruth" network. Brand names, logos, other symbols and slogans, or even parts of slogans (e.g., "Melts in your mouth, not in your _____," or "At __, progress is our ____ important product.") also may serve as "distinctive" nodes.

When combined, nodes that, by themselves, are not distinctive, also can serve a distinctiveness function. For example, thousands of players, coaches, and owners have been associated with the "New York Yankees." Thus, to say "New York Yankees" would not necessarily identify Babe Ruth. The same is true for the nodes "baseball legend," "home run slugger" and "once a pitcher for the Boston Red Sox." Considered in isolation, none of these nodes is sufficient to enable one to automatically make a positive identification. Indeed, knowing any three of the four might still be insufficient, as there are many players who might be called to mind by the nodes: "New York Yankee," "baseball legends," including some who were "once a pitcher for the Boston Red Sox" (Roger Clemens). When these four independent, non-unique-identifying nodes are combined, however, most of those familiar with baseball will recall Babe Ruth and only Babe Ruth. In this manner, a particular combination of non-distinctive elements may come to serve a "sole source identifying" function.  

This leads to the next summary statement:

13. Though not distinctive by themselves, certain combinations of nodes can operate as "collectively distinctive," thereby serving a distinctiveness function.

Before a consumer can make sense out of what is "out there" (for instance, a product name, a product package, an advertising claim), she needs to draw on and use information she already has in her mind. How she interprets (and misinterprets) the things she experiences is fundamentally influenced, and often entirely determined, by her prior knowledge and experiences. "In general, comprehension involves interpreting new input in terms of what we already know about the world."  

Consider the following passage:

The procedure is quite simple. First you arrange things into different groups. Of, course, one pile may be sufficient depending on how much there is to do. If you have to go

30. The fact that the activation of a combination of non-distinctive nodes may also lead to mistaken identifications (e.g., the combination of "New York Yankee," "baseball legends," and "once a pitcher for the Boston Red Sox" may cause some to think of Roger Clemens) will be discussed infra.

31. Smyth et al., supra note 12 at 187.
somewhere else due to lack of facilities, this is the next step; otherwise, you are pretty well set. It is important not to overdo things. That is, it is better to do too few things at once than too many. In the short run, this may not seem important, but complications can easily arise. A mistake can be expensive as well. At first the whole procedure will seem complicated. Soon, however, it will become just another facet of life. It is difficult to see any end to the necessity for this task in the immediate future, but then one can never tell. After the procedure is completed, one arranges the material into different groups again. They then can be put into their appropriate places. Eventually they will be used once more and the whole cycle will have to be repeated. However, that is part of life.32

Though we understand each of the words and each of the sentences, most people are unable to identify the familiar procedure being described. Comprehension of the core idea is missing. The reason why we fail to understand the basic gist of the paragraph is because we have failed to identify and then extract the proper cognitive network (or schema) from memory to use as the basis for placing these individually meaningful sentences into the context of something we already know. However, once we are told that the passage describes washing clothes, it makes sense. In other words, comprehension of elements in the outside world is predicated on what we already stored have in memory. "Comprehension and memory are interwoven."33 This leads to a final summary statement:

14. The cognitive networks in one's memory are not only used for storing information, but also play a fundamental and often decisive role in interpreting the incoming information from the outside world.

III. RELATING PSYCHOLOGICAL PRINCIPLES TO ACQUIRED DISTINCTIVENESS, GENERICISM AND FAME

The concepts discussed thus far provide a foundation for understanding how marks and trade dress can "acquire distinctiveness" and serve a source-identifying function for consumers. By repeated exposure to and apprehension of the outside world,


33. Smyth et al., supra note 12 at 186.
consumers develop cognitive networks to mentally represent the companies, products, brands and stores that they encounter. Once ensconced in memory, these networks assist in the interpretation (and, as we shall soon see, the misinterpretation) of what is experienced.

A. Acquired Distinctiveness

Marks that are inherently distinctive require no showing of secondary meaning and merit the highest level of protection. The law recognizes that fanciful and arbitrary marks clearly represent intellectual property and, hence, deserve protection regardless of anything else. Despite this, it is entirely possible for arbitrary or fanciful marks at the highest end of the distinctiveness spectrum to convey no meaning whatsoever to purchasers and prospective purchasers in the pertinent product category. Suppose one were to come out with a new type of writing instrument and name it “Blyphstyk.” Being arbitrary and fanciful, it would be entitled to the highest level of protection. However, such marks are of no concern here. Our focus is not on marks that, by virtue of law, are legally protectible, but on marks that have “acquired distinctiveness through secondary meaning.” That is, on marks and dress for which consumers have formed cognitive networks.

When a “substantial,” “appreciable,” or “significant” proportion of the relevant consuming public develops cognitive networks for a product or service, and these networks possess one or more nodes capable of serving to uniquely identify that product or service and only that product or service as coming from a particular (albeit anonymous) source, then, from a psychological perspective, that node (or nodes) may be said to have “acquired distinctiveness” or achieved “secondary meaning.” Consider

34. Note that the nodes formed in the consumer’s mind may not be “isomorphic” (ie, identical) to the information objectively present in the outside world. For example, though a bottle of wine may be sold for $3.99, this information may be filed in the consumer’s mind not as “$3.99,” but as “cheap.” When later questioned about that particular wine, the consumer may recall “cheap” but not be able to recall $3.99.


36. In explaining what constitutes secondary meaning, Professor McCarthy writes: "It is not necessary that each and every member of the buyer class associate the mark with a single source. . . . It is apparent that 'it is only necessary to show that a substantial segment of the relevant group of consumers made the requisite association' between symbol and source to prove secondary meaning." 2 McCarthy, supra note 3, §15:5 at 15-9 (emphasis in original). At several places in §15:5, Professor McCarthy goes to great lengths to explain that secondary meaning is essentially nothing other than a mental association: "The prime element of secondary meaning is a mental association in buyers' minds between the alleged mark and a single source of the product." 2 McCarthy, id, §15:45 at 15-68 (emphasis in original).
Reese's Peanut Butter Cups®, for decades one of the two or three leading brands of chocolate covered candy sold in the United States. The packaging for Reese's Peanut Butter Cups® contains several protected marks, including the name “Reese's” and the phrase “peanut butter cups” appearing in a saw-toothed rendition of the “peanut butter cups” profile. From the consumer's perspective, it matters not whether, from the perspective of trademark law, these marks are inherently distinctive or not inherently distinctive. What matters is that, for them, simply seeing the name “Reese's” is sufficient to evoke the concept “a manufacturer of peanut butter and chocolate candies,” while the phrase “peanut butter cups” appearing in a saw-toothed rendition of the “peanut butter cups” profile is sufficient to evoke an understanding of a specific kind of candy.

This product's shape and packaging also contain a number of other elements that, because they have always appeared along with this and no other confectionery product, are sufficient to cause the cognitive network Reese's Peanut Butter Cups® to be called forth into consumers' consciousness—to have acquired distinctiveness or secondary meaning. One such element is the distinctive proportions and juxtaposition of certain shades of orange, yellow and brown that were used on the packaging for decades. In the absence of any other information, approximately ninety percent of purchasers and prospective purchasers of chocolate-covered candy use this particular combination of colors to identify Reese's Peanut Butter Cups®, and only that product.

At a rate of ninety percent identification, this combination of colors may be said to be "famous" among consumers in this product category. Though not tested, it also is quite likely that the unique "feel" of this product also has acquired distinctiveness and come to represent this particular product in consumers' minds. Blindfolded, most consumers in this product category could likely rely on tactile cues alone (the size, shape, and distinctive ridges of this candy) to have their Reese's Peanut Butter Cups® cognitive network brought to mind.


Lay consumers are aware that certain terms represent the name of a category of products (e.g., "pencil") and that certain product features can be characteristic or descriptive of many, or any, offering in the product category. For example, regardless of the manufacturer or brand name, virtually all users and prospective users know that all lead pencils have a graphite core, most have a wooden exterior, and many of these are yellow colored. Without using the technical terms, they know that "lead pencil" is a genus and "wooden exterior" and "yellow color" are characteristics descriptive of many pencils in the category.

Envision a continuum featuring a category "is characteristic of only one item" at left end and "could be characteristic of any item" at the opposite right end. These poles correspond to "possesses secondary meaning" at one pole versus "does not possess secondary meaning" at the other. Recognize that these are the only two states that exist in a lay consumer's mind. Unless they are trademark attorneys, consumers care not whether something is arbitrary, fanciful, suggestive, descriptive or generic. Their cognitive networks simply tell them that the combination of features in the external environment either does or does not signify an item that they associate with a particular source.

When considered this way, if secondary meaning represents the left pole of the continuum then, for consumers, genericism represents the right pole. When certain aspects of an item (including trade dress) have, in the cognitive networks of a "substantial," "appreciable" or "significant" proportion of consumers in a product category, come to represent a single brand or source, this information has acquired distinctiveness and achieved secondary meaning. Such would be the case for the "proportions and juxtaposition of the colors orange, yellow and brown in certain shades" that, for ninety percent of consumers of chocolate covered candy, signify Reese's Peanut Butter Cups and only that product. On the other hand, if the product's features (e.g., "has chocolate," "is made from nuts") call to the mind of most consumers any number of items in that category, then, in the

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39. "Secondary meaning" here is referred to in the sense that this unique pattern of package colorings signifies a particular source for consumers. As articulated in Wal-Mart Stores, Inc. v. Samara Brothers, Inc., 529 US 205, 120 S Ct 1339, 146 L Ed2d 182, 54 USPQ2d 1065 (2000), and subsequent case law decisions (see I.P. Lund Trading ApS v. Kohler Co., 118 F Supp2d 92, 56 USPQ2d 1776 (D Mass 2000)), the question of whether the "primary significance" of a product's shape is to indicate the source of the product is not addressed by the above-referenced discussion.
language of trademark law, they are merely descriptive and possibly generic.\(^4\)

C. Fame

From a cognitive psychological perspective, fame is nothing other than a higher level of acquired distinctiveness or secondary meaning. What remains to be established are the answers to several delimiting factors. First, what is the proper universe for determining fame? Second, given that tests are conducted among the appropriate universe, what percentage affirmative response should be accepted as the threshold level of fame?

Consider whether "fame" should be assessed based on the perceptions of the population as a whole (thereby establishing "universal fame"), or whether it should be assessed based only on the perceptions of prospective consumers of plaintiff's and defendant's products or services (thereby establishing "niche market fame").\(^4\) For example, the names Antonio Stradivari and Ernest Hemingway likely possess universal fame. Regardless of whether they are prospective purchasers of violins or novels, substantial proportions of the general public can correctly identify the former as the source of the famous Stradivarius violin and the latter as a famous 20th century author.

In contrast, although they also identify a highly regarded string instrument maker and highly respected author, respectively,

40. As McCarthy notes in §12.20, however: "The distinction between highly descriptive terms and generic names is difficult to state in the abstract. . . . the difference between descriptive terms and generic names is a critical one which must be studiously observed." 2 McCarthy, supra note 3, §12:20 at 12-56 to 12-57. This is because, while descriptive terms may acquire secondary meaning, generic terms can never acquire secondary meaning. To avoid confusing matters, the term "merely descriptive" is used here to mean descriptive features that do not possess secondary meaning.

41. Niche market definitions are appropriate under certain circumstances. Specifically, "a mark that is highly distinctive only to a select class or group of purchasers may be protected from diluting uses directed at that particular class . . . [U]ses of the mark in broader markets, although they may produce an incidental diluting effect, in the protected market, are not actionable." Restatement (Third) of the Law of Unfair Competition, §25, comment e at 269 (ALI 1995). The case law, to date, has not treated this issue precisely. As noted by the Seventh Circuit, "[s]ome cases apparently hold that fame in a niche market is insufficient for a federal dilution claim, while some hold that such fame is sufficient." Syndicate Sales, Inc. v. Hampshire Paper Corp., 192 F3d 633, 640, 52 USPQ2d 1035 (CA 7 1999). The Third Circuit majority, in a case involving "The Sporting News" mark, recently held that a mark not famous to the general public is nevertheless entitled to dilution protection where the parties operate in the same or related market as long as the mark enjoys a high degree of fame in the niche market. See Times Mirror Magazines, Inc. v. Las Vegas Sports News, L.L.C., d/b/a/ Las Vegas Sporting News, 212 F3d 157, 54 USPQ2d 1577 (CA 3 2000). The dissenting judge in the "Sporting News" case, in contrast, found no support in the federal dilution statute or its legislative history for a niche market theory of fame. According to the dissent, if one accepts the niche market theory of fame, dilution law will devour infringement law since dilution is not needed in cases where parties compete in the same market.
the names Gibson and J. Thomas McCarthy likely possess only "niche market" fame. Among the vast majority of purchasers and prospective purchasers of quality guitars, Gibson is recognized as the name of an esteemed guitar manufacturer. To those familiar with trademark law, J. Thomas McCarthy is a pre-eminent scholarly authority in the field. Both are famous within their respective realms.

Interestingly, Professor McCarthy suggests an even more narrow focus than the prospective consumers of both plaintiff's and defendant's products or services. "In the author's view, a mark should not be categorized as 'famous' unless it is known to more than 50% of the defendant's potential customers."

Regardless of which type of universe is considered most appropriate for determining fame, the question still to be resolved is: "What level represents fame?" As noted, Professor McCarthy suggests a fifty percent threshold for determining fame (and perhaps a somewhat lesser level for determining secondary meaning). Some courts have applied a fifty percent threshold for determining acquired distinctiveness. If fame is to be determined by testing the universe of purchasers and prospective purchases then, presumably, one would need to apply a higher threshold than fifty percent for fame, lest the difference between fame and secondary meaning become blurred.

IV. RELATING PSYCHOLOGICAL PRINCIPLES TO CONFUSION AND DILUTION

Numerous theories and findings in psychology help explain consumer confusion. Two topics, in particular, are directly relevant to trademark law. These concern how the outside world comes to be understood (or misunderstood) and the influence of expectations and context on the extraction of meaning.

42. Different perspectives on whether universal versus niche market definitions should apply to fame have been suggested by Professor McCarthy. If one views fame as a higher level of secondary meaning, then the following observation becomes relevant: "While the 'focus' of secondary meaning is 'the consuming public,' it need not be proven among the general public if a product is targeted at only a specific segment of the general public."  2 McCarthy, supra note 3, §15:46 at 15-71 (emphasis in original).

43. 4 McCarthy, id, §24:112 at 24-241 (emphasis added).

44. "It is not necessary that each and every member of the buyer class associate the mark with a single source . . . it is only necessary to show that a substantial segment of the relevant group of consumers made the requisite association between symbol and source to prove secondary meaning." 2 McCarthy, id, §15:45 at 15-68 (emphasis in original).
A. How the Outside World Comes to Be Understood or Misunderstood

While awake, people are literally bombarded by sensory input from the external world. Psychologists call these inputs "stimuli." Some of these outside stimuli come in the form of products, brands, packages, logos, print ads, slogans, television commercials and jingles.

Generally, the consumer does not pay attention to all this information. Even when stimuli appear directly in front of a person, so that they clearly impinge upon sensory receptors, the vast majority of stimuli fail to register upon the consumer's consciousness. For example, though clearly within the reader's field of vision and visual receptors, while reading a particular newspaper article, adjacent advertisements and articles generally do not register in the reader's conscious mind. This is because, at any given point in time, there are so many sensory stimuli directed at the reader that attention cannot be paid to most of them. To avoid "information overload," the processes of sensing, attending to and perceiving (i.e., assigning meaning to that which is sensed), of necessity, are highly selective.

How do people go about interpreting stimuli that are received through one's senses? In large part, the answer depends upon what information—specifically what cognitive networks—were previously generated and stored in memory. This is because incoming information is interpreted in terms of prior knowledge. Moreover, the process of retrieving information stored in memory to interpret new stimuli is not done with conscious deliberateness, but unconsciously and virtually instantaneously, generally within the first two hundred milliseconds after apprehending the incoming information.

Consider the following example. Suppose an individual were to attend to a physical stimulus consisting of two vertical lines of equal length arranged in parallel and being asked "What number does this represent?" Most people would interpret this physical stimulus as representing the number eleven. However, someone accustomed to working with antiquities or signed and numbered lithographic prints might interpret this same objective stimulus as representing the Roman number two, while someone conversant with computer binary systems might interpret two one's in parallel as representing the binary number four (where 00 = 1,

45. For a fuller discussion of these issues, the reader is directed to Jacoby and Szybillo, supra note 26, especially pages 225-26 and Exhibit 1.

Thus, the external, physical, objective environment in which incoming information is interpreted is always based upon the individual's prior knowledge. Psychologically perceived reality, not objective reality, determines interpretation and reaction to stimuli.

Moreover, research shows that, for any individual, "[i]nformation that is more accessible (i.e., information that has the strongest associative links) is more likely to be recalled and enter into the . . . process. . . ."\textsuperscript{46} of identifying and interpreting the incoming stimuli. This suggests why famous marks, by definition, those with strong associative links to information stored in memory, tend to be so powerful. Such research also supports the well-known trademark law principle that "strong" marks are entitled to a broader scope of protection than "weak" marks.\textsuperscript{47}

Most information confronting consumers is considerably more complex than the example of two parallel lines. For example, even without considering the graphics and colors, the typical breakfast cereal package contains more than one hundred separate items of alphanumeric information. Moreover, in the purchasing environment, such packages normally appear in the context of other packages and non-package information. When apprehending stimuli consisting of such complex information arrays, rarely do consumers exhaustively consider all the features of the external stimulus, then compare it to stored memory to reach the conclusion that the item is or is not another exemplar of what is already known. Rather, the consumer typically considers but a few of the cereal package's features, attributes or characteristics. This "feature information" is placed into cognitive workspace and information (a distinctive node or combinations of nodes) is retrieved from memory to help identify, interpret and classify the information just extracted from the outside world.

Exhibit 1 attempts to diagram these concepts. Suppose a consumer frequenting a shopping environment comes across a number of garments, including a set of football replica jerseys, each of which possesses various attributes. Though many environmental stimuli may be impacting upon the individual, Exhibit 1 limits attention to but one of these garments (Garment A) and its attributes. These attributes include its colors (particular shades of yellow and green), the name ("Green Bay") appearing in large letters across the front, a football indicia (the outline of a football)

\textsuperscript{46} See, eg, J.B. Williams Co. v. Le Conte Cosmetics, Inc., 523 F2d 187, 186 USPQ 317 (CA 9 1975) (strong mark entitled to greater degree of protection); Fotomat Corp. v. Cochran, 437 F Supp 1231, 194 USPQ 128 (D Kan 1977) (famous and strong mark is entitled to "broad protection").
appearing on a sleeve, a large numeral (4) in the center on the back, what appears to be a surname (Favre) above the numeral, various labels to indicate size, type of material, care instructions, price, name of the manufacturer, etc. All these features are objectively part of Garment A and, as depicted by the one-directional arrows emanating from these features, impinge on the individual's sensory receptors (i.e., are readily visible to the naked eye). However, as represented by the bi-directional arrows, the consumer typically pays attention to only a few of these features.\textsuperscript{48}

Assume that the features catching the consumer’s attention are that Garment A comes in particular shades of green and yellow and bears the name “Green Bay.” For many prospective consumers, placing these three features (football replica jersey + particular shades of green and yellow + the name Green Bay) into their cognitive workspace would be sufficient to evoke their Green Bay Packer cognitive network from memory. Such consumers would think that what they are now confronting is merchandise associated with the Green Bay Packers.\textsuperscript{49} As discussed earlier, these three features, though not distinctive identifiers by themselves, in combination, they become “collectively distinctive.” Perhaps without bothering to consider any additional features other than price and size, some consumers may decide: “My grandson just loves the Packers. I think I’ll surprise him with this shirt.” Others may elect to consider additional attributes of Garment A (its coloring, its feel, the name of the manufacturer, etc.). But since the individual’s Green Bay Packers network has already been activated, whatever additional information is considered will be interpreted in terms of the context supplied by the person’s already activated Green Bay Packers cognitive network. As noted by Higgins:

Two basic variables influence the likelihood that some stored knowledge will be activated—the accessibility of the stored

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\textsuperscript{49} To portray how a person’s Green Bay Packers cognitive network co-exists with and connects to other information in memory, a faint wavy line has been placed around the nodes of this person’s Green Bay Packers network. Some of the possible nodes in the network are: Green Bay, Football Jersey, Yellow and Green; Lambeau Field; Brett Favre; Number 4; Reggie White; the NFL; winners of Super Bowls I, II and XXX; Vince Lombardi; and Bart Starr.
knowledge prior to the stimulus presentation and the fit between the stored knowledge and the presented stimulus. . . . The greater the overlap between the features of some stored knowledge and the attended features of a stimulus, . . . the greater is the likelihood that the knowledge will be activated in the presence of the stimulus. . . .

In sum, we do not need to pay attention to every single aspect of an external object (i.e., product, advertisement or store) before using what we have stored in our memory to interpret and identify that object. Instead, in interpreting the outside world, we generally rely on a process called “pattern recognition.” When a sufficient number of features represented in the incoming information match the pattern of features of a pre-existing cognitive network, we tend to fill in the details and interpret the object as an exemplar of that network. Pattern recognition provides the foundation for the popular Wheel of Fortune® television show. Given a unique name or multi-word phrase composed of a number of unknown letters, acquiring one letter at a time (G_EG_Y_E_K), contestants acquire just enough letters to enable them to identify that name or phrase (GREGORY PECK). Rarely is it necessary to acquire all the letters in order to identify the name or phrase.

Relying on pattern recognition usually results in correct identification and interpretation. Sometimes, however, our pre-existing cognitive networks (i.e., what we already know) may lead us to misinterpret and misidentify what we see. This is precisely the kind of phenomenon noted by Judge McKinney in Indianapolis Colts v. Metropolitan Baltimore Football Club.

Most people can probably recall a time when a return trip to the store was necessary because a word on a label triggered a memory that filled in the rest of the label, and caused them to select the wrong product. One’s intention may be clear and still the wrong product was purchased.


51. See, for example, Hunt and Ellis, supra note 7 at 51.

52. In keeping with the mind qua computer metaphor, pattern recognition by humans is comparable to employing an Optical Character Recognition (“OCR”) program to scan and recognize the individual letters of a document. Just as the OCR software examines the features of each letter and seeks to match it with a known pattern already stored in the computer’s memory, the cognitive workspace of the mind seeks to match the features of the information incoming from the outside world with information already stored in the consumer’s memory. And just as the OCR reader may misidentify a particular item (for example, misreading a capital “T” as a lower case “t”), the human information processor will make comparable errors.

53. Supra note 20.
The greater the similarity between the pattern of information extracted from the outside object and the pattern of information stored in a cognitive network, the greater the likelihood that one will be confused into thinking that the latter is an exemplar of the former.  

B. The Influence of Expectations and Context

A variety of factors affect the likelihood of misinterpreting and misidentifying incoming information. Two very important factors are the expectations brought to the situation and the surrounding context.

Consider coming across the letters “ca” (that, with a period attached, is the abbreviation for the Latin word “circa”). Since these two letters do not refer to a complete word in the English language, how does a person determine what this word fragment represents? Different contexts will prime arrival at different interpretations. When in a post office or looking at a map, the person might be inclined to interpret “ca” as “California.” In contrast, in an auto showroom, a person might be likely to think the missing letter was an “r” and see “ca” as “car,” while someone in a pet store might take “ca” to mean “cat.”

Similarly, in the context of Milwaukee and Appleton, the name Green Bay is likely to conjure up the notion of another Wisconsin municipality. In the context of a yellow and green football jersey and the name Brett Favre, the name Green Bay is likely to conjure up the Green Bay Packers.

Expectations and context are particularly potent when both are present. For example, though individuals might be shown line drawings of three basic shapes—a complete triangle, a circle with a six degree gap in its 360 degree circumference, and a complete square—when asked to recall what we saw, most will report seeing a triangle, square and a circle and will not recall any gap in the circumference of the circle. This is an example of the “triggering a memory that fills in” referred to by Judge McKinney. In the context of seeing a complete triangle and square, we expect to see a complete circle—and that is what we recall seeing.

54. Because it relates to the distinction between trademarks and trade dress, it is worth mentioning that the psychological literature draws a distinction between “conceptually driven processes” and “perceptually driven processes.” Whereas the former focus on how meanings extracted from the external physical stimulus interact with meanings stored in memory, the latter are concerned with how perceptions of the physical features of the external information relates to physical feature information residing in memory. See, eg, H.L. Roediger, M.S. Weldon and B.A. Challis, Explaining Dissociations Between Implicit and Explicit Measures of Retention: A Processing Account, in H.L. Roediger and F.I.M. Craik (eds), Varieties of Memory and Consciousness (1989).
Relating this principle to Exhibit 1, though the jersey said "Green Bay" and not "Packers," a consumer might easily fill in this missing detail. Further, when later asked to recall what one saw, one might very well report having actually seen the name "Green Bay Packers" on the garment.

In describing how "people go beyond the information given . . . , using their general knowledge to inferentially flesh out a given set of facts or observations," Carlston and Smith\(^55\) write as follows:

A schema can be viewed as a small chunk of [an] associative network within which the nodes are particularly strongly linked, so that the activation of one tends to activate all the rest.

There is no question that people frequently [go beyond the information given, using their general knowledge to inferentially flesh out a given set of facts or observations]. . . . When stimulus information offers a sufficient match to a schema possessed by the perceiver, the schema is called up from memory and used to fill in unobserved details and to guide inferences.

Expectations and context can cause memory to do more than just "filling in" missing gaps, including ignoring disconfirming information and even "overwriting" stimuli. In a classic demonstration, researchers exposed test subjects to a handful of playing cards. Among the cards was one very unusual card — either a black four of hearts or a red four of spades. When subsequently asked to describe what they saw, more than ninety-six percent of the respondents recalled the red four of spades either as a red four of hearts, or black four of spades (ignoring either the incongruous color or incongruous form).\(^56\) In other words, in the context of the other "normal" cards, the respondents overwrote the stimuli and saw what they expected.

That expectations and context affect the consumer's interpretation of information is consistent with trademark law. The Lanham Act does not presume that consumers enter the marketplace as tabula rasa. Rather, it presumes that consumers enter the marketplace as thinking beings with a history of experiences regarding products and brands, and a set of expectations regarding what the current situation will provide. When combined with an understanding of how the consumer's cognitive networks are used to interpret information in the world about her, the notions of expectations and contexts become sufficient for explaining the

\(^{55}\) Carlston and Smith, supra note 11 at 184, 196.

\(^{56}\) E.R. Hilgard, Introduction to Psychology 386 (2d ed 1957).
overwhelming majority of cases where there has been a finding of likely confusion.

C. Cognitive Networks and Confusion

Illustrating a cognitive network for the Green Bay Packers, Exhibit 1 serves as the springboard for discussing how cognitive networks operate to create confusion. Earlier the letter A was used to telegraph that the green and yellow football replica jersey bearing the name "Green Bay" was officially "authorized" either by the Green Bay Packer organization and/or National Football League Properties, Inc. Now suppose that, as was the case in NFL Properties v. ProStyle, the jersey came from a source that had no connection with, or license from, either of these parties. Let us designate this latter garment, Garment "U" (for "unauthorized"), and ask the reader to envision the corresponding change in Exhibit 1.

What thoughts are likely to be evoked by Garment U in the minds of consumers? Consider two categories of consumers: those having knowledge of the Green Bay Packers football organization and its indicia, and those without such knowledge.

Given exposure to Garment U, those unfamiliar with the Green Bay Packers football organization are not candidates for experiencing either trademark confusion or dilution. The reason is fundamental. For marketplace confusion or dilution between two entities or marks to occur, there must be prior familiarity with at least one of the entities or marks. Unless consumers associate a term with a single source, even if of unknown identity, there is no mark to protect nor to be diluted. Unlike acquired distinctiveness, where indicia are considered to represent a single entity with no comparative context necessarily implied, both confusion and dilution require two independent entities. Upon coming across a product from one entity (Garment U), one cannot be confused if one has no knowledge stored in memory regarding the other entity (in this case, the Green Bay Packers).

In contrast, for those familiar with the Green Bay Packers, three outcomes are possible: (1) neither confusion nor dilution, (2) confusion, or (3) dilution.

Some proportion of consumers familiar with the Green Bay Packers may exhibit neither confusion nor dilution. These people

57. 57 F Supp2d 665, 49 USPQ2d 1374 (ED Wis 1999).
58. As Professor McCarthy writes: "[A] buyer who does not recognize plaintiff's 'mark' and does not distinguish it from any other, cannot be confused." The reason for this is simple: "That is, the basic principle is that if there is no secondary meaning, there is no mark to protect and confusion is not possible." 2 McCarthy, supra note 3, §15:11 at 15-23 to 15-24.
may distinguish between the town of Green Bay, Wisconsin and
the NFL's Green Bay Packers football team so that, upon seeing
Garment U, they associate the garment with the town of Green
Bay, Wisconsin, not with the Green Bay Packers.

Another, probably larger, proportion of those consumers
familiar with the Green Bay Packers would be confused. As
depicted in Exhibit 1, three prominent features of the garment (a
football replica jersey + particular shades of green and yellow +
bearing the name “Green Bay”) probably would be sufficient to
evoke their Green Bay Packers cognitive networks and lead them
to identify Garment U as another exemplar of something they
already know. Such people probably would be misled into thinking
that the merchandise either comes from, or was authorized by, the
Green Bay Packers and/or the National Football League, or comes
from a company that had some kind of business connection or
affiliation with one or both of these parties.

A number of the ProStyle football replica jerseys featured
either the term “Pack” or a large letter “P” in the center of the
garment, immediately under the name “Green Bay.” In the
context of the other attributes, these would serve to reinforce
consumer confusion. Many consumers would interpret the “P” (or
the term “Pack”) as representing the “Packers.”\(^5\)\(^9\) While some
might not realize that the Green Bay Packers’ logo consists of a
stylized “G,” not a stylized “P,” even those who may know this
could be expected to have this knowledge “over-written,” espec-
ially at the point of purchase. The consumer would experience
what is termed “confirmation bias,” or “the fact that we are more
likely to recall information that reinforces rather than contradicts
our overall beliefs.”\(^6\)\(^0\)

Some might argue that most purchasers would exercise a
certain degree of care and, as a consequence, it would be unlikely
that such consumers would be confused. However, recent research
suggests just the opposite: “Under high-involvement conditions
[i.e., conditions under which individuals typically exercise a high
degree of care], consumers use information on shared meanings
between brand names to make common source determinations.”\(^6\)\(^1\)
Especially when seen in the context of a specific green and yellow
color combination on a football replica jersey, consumers under
high-involvement conditions are likely to extract a strong degree
of shared meaning between seeing the terms “Green Bay,” “Pack”

\(^5\)9. If the defendant had used any letter other than G or P, this might have been
sufficient to decrease confusion, perhaps to de minimus levels.

\(^6\)0. Hoyer and MacInnis, supra note 16 at 200.

\(^6\)1. D.J. Howard, R.A. Kerin and C. Gengler, The Effects of Brand Name Similarity on
and the letter "P" and their stored memories of the "Green Bay Packers." Ergo, there is likely to be consumer confusion.

A third possibility resulting from exposure to Garment U is dilution, a topic to which we return after some further discussion of confusion.

**D. Types of Confusion**

Section 43(a) of the Lanham Act identifies three types of consumer confusion: source confusion, confusion as to affiliation or connection, and confusion as to authorization or sponsorship. Subsequent case law has added further layers of complexity, holding that confusion can arise in a number of different contexts—called forward confusion, reverse confusion and subliminal confusion. In terms of the cognitive psychological framework outlined above, these various forms of confusion can be differentiated in the following ways:

1. **Forward and Reverse Confusion**

Forward and reverse confusion are relatively easy to differentiate. In order to have forward confusion, the consumer must possess a cognitive network for the first-comer's product or service before being exposed to stimulus information emanating from the second-comer. In this way, the consumer's cognitive network for the first-comer is used to interpret the incoming information, thereby confusing the second-comer with the first-comer.

In contrast, in the case of reverse confusion, the consumer has no pre-existing cognitive network for the first-comer, but has developed a cognitive network for the second-comer. Upon being exposed to an outside stimulus emanating from the first-comer, the cognitive network for the second-comer is used to interpret the incoming information, resulting in the first-comer being confused with the second-comer.

2. **Confusion as to Source, Confusion as to Affiliation or Connection and Confusion as to Authorization or Sponsorship**

A consideration of cognitive networks suggests that the three types of confusion referred to in the Lanham Act—namely, source confusion, confusion as to affiliation or connection, and confusion as to authorization or sponsorship—may be re-conceptualized as follows:
Single source confusion
Origin confusion
Item confusion
Multiple source confusion
Affiliated source confusion
Independent source confusion

Single Source Confusion: The distinction between origin and item confusion is necessary because, though both are forms of source confusion, from a cognitive networks perspective, they are fundamentally different. In the case of item confusion, the consumer's pre-existing cognitive network remains unmodified. However, in the case of origin confusion, that cognitive network is significantly modified.

To illustrate, consider a question often used to measure source confusion: “What other products are put out by the same company which put out the item now in front of you?” This question actually measures two types of confusion. In one instance, the consumer thinks (incorrectly) that the item in front of him is an item he already knows, and the question is asking him to identify the other items that come from the same source. In the second instance, the consumer thinks (correctly) that he has not seen the item in front of him before, but, because of its mark or dress, it is put out by a source he knows; thus, all the question asks of him is to identify other items that come from that same source. In the first instance, the consumer is confused regarding the item (item confusion). In the second instance, the consumer is confused regarding the source of the item (origin confusion).

With “item confusion,” the consumer's pre-existing cognitive network has not been modified. The consumer simply interprets the item as an exemplar of something she already has in mind. For example, upon seeing a hand lotion named “Vase-Line Intensive Care Lotion,” she may be confused into believing that what she is now looking at is an authentic bottle of “Vaseline Intensive Care Lotion.”

“Origin confusion,” on the other hand, refers to the situation where, although the consumer knows the item is not the same as the item she knows, as a result of its mark or dress, she is confused into thinking it comes from the same source as an item she knows. With origin confusion, the pre-existing cognitive network is modified; the consumer is confused into attaching another node (information regarding the new item) to the pre-existing cognitive network. For example, the consumer may believe that, although it is not quite the same thing as “Vaseline Intensive Care Lotion,” a lotion using the name “Vase-Line Intensive Care Lotion” must come from the same source as that
which sells "Vaseline Intensive Care Lotion." The pre-existing cognitive network for "Vaseline Intensive Care Lotion," thus, is modified by having another node ("Vase-Line Intensive Care Lotion") attached to it. The consumer has been confused into thinking that two items put out by two independent entities originate with the same source.

As exemplified by many case law decisions, origin confusion does not require the consumer to have any idea of the identity of the source. In fact, while approximately ninety-five percent of consumers and prospective consumers of "Vaseline Intensive Care Lotion" are able to rely on the trade dress alone to identify this brand, fewer than ten percent of these consumers know that it is made by Chesebrough-Ponds. In other words, the internal cognitive networks of these consumers do not contain any node identifying a specific manufacturer. From the standpoint of trademark law, it is only necessary that the consumer believes that "Vaseline Intensive Care Lotion" and "Vase-Line Intensive Care Lotion" are made by the same "common anonymous" source.

Item confusion is a more subtle and potentially more insidious form of source confusion than origin confusion. With origin confusion, though the consumer mistakenly believes she knows the source of the item, she also knows the item is somewhat different from any item previously seen. Hence, she is more likely to read the package labeling, thereby increasing the chances that she will see and read any usage, storage and maintenance instructions, warnings or precautions. On the other hand, with item confusion, the consumer (mistakenly) believes she already knows the item. Hence, she is less likely to read the package labeling, thereby increasing the potential for product misuse and other dangers.

Multiple Source Confusion: While origin and item confusion refer to cognitive networks involving a single (albeit, possibly anonymous) source, the other types of confusion mentioned in the

63. Generally, this is a direct result of the company's branding strategy. For various marketing reasons, some companies employ an "umbrella branding" strategy according to which every product sold by that company bears the company's name. The General Electric Company provides a good example of a firm employing umbrella branding. Various types of products from nuclear power equipment to home appliances to jet engines are all branded under the General Electric umbrella brand. On the other hand, and for a different set of equally valid marketing reasons, other companies prefer to have each brand they sell stand on its own two feet. Such companies de-emphasize the corporate name. A prime example of this branding strategy would be the Procter & Gamble Company, which sells such branded products as Ivory, Tide, Crest, Gleem, Charmin, Pampers, Pringles, Duncan Hines, Cheer, Gain, Dreft, Dash, Bold, Era and Oxydol.
Lanham Act imply that the consumer is aware of two or more distinct sources. In some cases, one source may be seen as being formally affiliated with the other, for example, as a division, subsidiary or United States presence of a foreign firm (Honda of North America). In other instances, the consumer recognizes that the two sources are independent entities, but believes that there is some form of business connection or affiliation between the two entities, or that one entity has authorized, sponsored, or licensed the other to engage in the practice at issue. For example, from time to time, fashion designers (Gucci, Bill Blass and Christian Dior) have licensed automobile manufacturers (General Motors and Ford) to use their names for specially appointed automobiles. In such instances, consumers generally are aware that the two entities (the designer and the auto manufacturer) are separate and independent entities, but have agreed to cooperate in this particular instance.

3. Subliminal Confusion

A number of courts have mentioned another form of confusion—"subliminal confusion."64 This is defined as "a case in which confusion or deception occurs on a subliminal or subconscious level. . . ."65 As Kirkpatrick pointed out, a consequence of subliminal confusion is that "the newcomer may gain a foothold in the first user's market by exploiting subliminal associations with the prior mark."66 While some of these decisions may be using the term subliminal confusion to refer to one of the previously discussed forms of confusion, psychological theory and research suggest that confusion may occur at levels that are not consciously retrievable. This is because not all the experiences and information stored in our memory are equally or easily accessible


65. Ortho, ibid.
66. Kirkpatrick, supra note 4 at §1.4.D.
by the individual. Further, not all information residing in one's memory can be retrieved in response to an interviewer's questions. As explained earlier, the realm of memory may be viewed upon as a continuum from information (including cognitive networks) that can be easily recalled to information (and cognitive networks) not easily recalled. The latter may be conceptualized as residing in memory somewhere to the right of where Exhibit 1 ends.

Though laboratory procedures (primarily relying on reaction times) enable researchers to infer the presence of some of this information,67 these procedures probably would not be judged admissible by most courts. Regardless, research has confirmed the presence of "implicit memory" and "automaticity,"68 thereby providing a scientific basis for understanding subliminal confusion. Though information residing deep in memory may not be retrievable in response to an interviewer's questions, through a process of spreading activation and linkages to other information that is retrievable, subliminal information may produce confusion, though it may not be detectable in a procedure that would pass judicial muster.

E. Cognitive Networks and Dilution

The Federal Trademark Dilution Act specifically prohibits "dilution of the distinctive quality of [a] mark."69 As defined in Section 45 of the Lanham Act, dilution is "the lessening of the capacity of a famous mark to identify goods and services, regardless of the presence or absence of (1) competition between the owner of the famous mark and other parties, or (2) likelihood of confusion, mistake or deception."70 Moreover, dilution may take two forms71—either a "blurring of distinctiveness" or "tarnishment."72

1. Blurring of Distinctiveness

Consider a situation with neither competition nor a likelihood of confusion between the famous mark, "Rolex," and use of the same mark by a second comer for a vacuum cleaner. For con-

69. Section 43(c), Lanham Act, 15 USC §1125(c).
70. Id §45, 15 USC §1127.
71. See 4 McCarthy, supra note 3, §24:67.
72. Ibid.
sumers unaware of the first-comer’s use of the mark, there can be neither (forward) confusion nor dilution. However, if it is truly a universally famous mark, then most consumers will have some awareness of it. For consumers aware of the first comer, simply hearing the name “Rolex” likely is sufficient to evoke a particular cognitive network (luxury watches having particular appearance and performance characteristics and the ability to convey a certain status to wearers of such watches). At issue is whether the second comer’s use of the mark will harm the first comer by causing “a blurring of the mental associations evoked by the mark.”

While some consumers who become aware of the mark’s use on both products may not be confused into any of the ways recognized by the Lanham Act, these consumers necessarily come to possess two cognitive networks (i.e., sets of associations) for the same mark. From that point onward, upon hearing or seeing the name Rolex, there will be a weakening or “blurring of the mental associations evoked by the mark,” such that the ability of the mark to uniquely evoke the cognitive network originally associated with that mark has been whittled away or diluted.

Essentially, use by the second comer has muddied the waters so that the consumer will require additional information before being able to determine just which cognitive network applies. In terms of the continuum labeled “is characteristic of only one item” at one end and “could be characteristic of any item” at the other, dilution (qua blurring) represents a region along the continuum that begins where the “characteristic of only one item” pole leaves off.

In situations where competition exists between the owner of the famous mark and a second party, dilution represents a more insidious problem. In such situations, dilution becomes but a step along the path to mere descriptiveness and possibly even genericism. This was plaintiff’s argument in NFL Properties v. ProStyle.

Assume that the Green Bay Packers and its associated marks and indicia are “famous” among the public at large and in particular among professional football fans. Under these circumstances, upon seeing Garment U (the unauthorized version of Garment A in Exhibit 1), both confusion and dilution are possible. Those experiencing dilution might include individuals who never

73. Restatement, supra note 41, §25, comment f at 270.
74. Though perhaps overlapping only in brand name, the greater the overlap in attributes shared by the two entities, the greater the likelihood that these two cognitive networks will become and intertwined.
76. Supra note 57.
were confused and others who, though initially confused, were no longer confused. In either case, these consumers have come to understand that two completely independent entities (one of which bears no association with either the Green Bay Packers or the NFL) distribute replica football jerseys in yellow and green colors that have “Green Bay” emblazoned on their fronts. Though not confused, these individuals would likely experience a “blurring of distinctiveness” and “weakening of associations” between the NFL’s Green Bay Packers and the use of yellow and green on football replica jerseys bearing the name “Green Bay.” This result is depicted in Exhibit 2. Whereas, prior to the introduction of defendant’s merchandise, these consumers associated only one source with this combination of indicia, these indicia now cause them to call forth two separate cognitive networks, linked by virtue of their sharing these common indicia.

The resultant harm could take several forms. At the very least, the consumer would be required to engage in additional cognitive effort to parse out just which network applied to the current circumstances. Generally, the more effortful an activity (including a mental activity), the less likely it is to be performed, especially when other options are available—a sort of “Why bother; I’ll select something else” kind of response. Additionally, laboratory studies using the marks HEINEKEN and HYATT reveal that “trademark dilution can reduce the strength of preexisting brand associations through the creation of additional nodes in consumers’ brand based memory networks. [Further, exposure to the second comer’s promotional use of the mark] can reduce the accuracy and, to some extent, the speed of retrieval from memory of first-user brand information.”

Perhaps most importantly, trademark dilution may also lead to a reduction of brand equity for the first user. As Aaker has explained, “The underlying value of a brand name often is based

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77. The federal courts of appeals are currently divided as to whether proof of actual, consummated harm is required in order to prevail under a claim for dilution under the Lanham Act. See Ringling Bros.-Barnum & Bailey Combined Shows Inc. v. Utah Division of Travel Development, 170 F3d 449, 50 USPQ2d 1065 (CA 4 1999) (actual, consummated harm is required); Nabisco, Inc. v. PF Brands, Inc, 191 F3d 208, 51 USPQ2d 1882 (CA 2 1999) (dilution claim requires proof of likelihood of confusion only); Westchester Media v. PRL USA Holdings Inc., 214 F3d 658, 55 USPQ2d 1225 (CA 5 2000) (actual harm must be established to prevail on dilution claim). One commentator noted that: “Demanding proof of actual harm as a predicate for dilution’s invocation contravenes, indeed, the logic of the Lanham Act.” See Swann, supra note 75 at 858.


79. Simonson, ibid.
upon specific associations linked to it.”\textsuperscript{80} In contrast to accepted practices in other nations (including the United Kingdom), current United States accounting practices do not permit listing brand equity on corporate balance sheets. However, it is widely recognized that a company’s brand names and the equity linked to those names are often valuable assets. Some would argue they are the most valuable assets most companies own. For example, primarily for reasons having to do with its valued brand name, Philip Morris paid $12.9 billion to acquire Kraft, an amount equal to four times its net asset value. For various reasons (such as familiarity or trust), consumers generally are willing to pay a premium for merchandise bearing famous names. Diluting the associations to a famous brand therefore has the potential to generate a serious, negative impact upon the value of that name.

Cognitive psychological research on what has been termed the “fan effect” also supports the concept of dilution. The “fan effect” can be illustrated as a hub having a single spoke leading to a single circle, where the hub represents a mark and the circle represents a set of nodes (perhaps even a well-developed cognitive network) containing meaningful information. Think of the hub containing the name Tiffany joined by a spoke to a circle containing the information “an up-scale retailer of silver, crystal and jewelry on New York’s Fifth Avenue” (see Exhibit 3). The “fan” associated with this famous mark is described as having a single spoke.

Now consider that, sometime later, the consumer attaches to this same hub (the name Tiffany) a second spoke leading to another circle, this one containing the information “an up-scale furrier.” This “fan” is described as having a spoke of two. Suppose, further, the same hub later acquires a third spoke leading to the information “a retailer of fine inlaid wood floors.”

Considerable psychological research reveals that as the number of spokes increases, the speed and cognitive ease with which the individual is able to connect the hub (Tiffany) with the original information (“an up-scale retailer of silver, crystal and jewelry on New York’s Fifth Avenue”) decreases. This is the essence of a “weakening of associations,” “whittling away” or “the lessening of the capacity of a famous mark to identify goods and services.”

Blurring of distinctiveness can also apply to trade dress. In Hershey Foods Corp. v. Mars, Inc.,\textsuperscript{80a} plaintiff argued that this is what happened when Mars, Inc. began using virtually the same

\textsuperscript{80} Aaker, Managing Brand Equity, supra note 26 at 20.

\textsuperscript{80a} Supra note 38.
colors on the packaging for its M&M's Peanut Butter Chocolate Candies as used by Hershey Foods for its Reese's Peanut Butter Cups®. Despite bearing different brand names, because the same colors appeared on two competing products emanating from two different sources, plaintiff argued there would be a blurring of distinctiveness such that the value of the famous and, heretofore, unique shades of orange, yellow and brown in combination would be diminished for both consumer and plaintiff. The consumer could no longer rely on this combination of "collectively distinctive" features to evoke solely the Reese's Peanut Butter Cups® network, and only that network, from memory. Eventually, M&M's modified its color scheme. However, had this situation continued and even more candy manufacturers had begun using the same color scheme, this color combination would have slipped anchor from the end of the continuum labeled "characteristic of only one item" and moved toward the end labeled "characteristic of any item." In this way, blurring could become so extensive that the colors and shades might become merely descriptive. Even though the accompanying company and brand indicia might dispel confusion as to the source of these different products, the colors and shades would no longer serve as a sole source indicator, and the commercial value they once possessed would be destroyed.

Last, it is possible for actionable levels of both confusion and dilution to co-exist. As a case in point, in the NFL Properties v. ProStyle matter described above, empirical evidence revealed that thirty percent of the public was confused, while thirty percent of the public experienced dilution via blurring.

2. Tarnishment

If dilution via blurring occurs when the consumer comes to identify the same attributes with two or more different sources, where does dilution via tarnishment fit in? From a psychological perspective, tarnishment operates at a different (subsequent) level and has a subtly different focus.

Psychologists and other cognitive scientists draw a distinction between being aware of, attending to or identifying something (a product, a mark, a store or a service) versus evaluating that something. As a general rule, one needs to appreciate the existence of an entity before it can be evaluated. As applied to dilution,
while blurring focuses on associations that are made, tarnishment focuses on the evaluative aspect of those associations (whether they are positive or negative, good or bad, liked or disliked). "The sine qua non of tarnishment is a finding that plaintiff's mark will suffer negative associations through defendant's use."\(^8\) Tarnishment entails an evaluation; blurring does not. Blurring requires only that associations previously made to a singular, famous source now become associated with a second source. It says nothing regarding whether these associations either undermine pre-existing positive associations or create negative associations.

A further subtle distinction occurs in regard to whether it is plaintiff's or defendant's mark that serves as the focus of dilution. Blurring emphasizes an association created between plaintiff's and defendant's marks. In contrast, tarnishment accords little or no attention to associations made to defendant's mark, instead focuses on the associations made to plaintiff's mark. While blurring refers to the quantity and strength of associations (i.e., use by the second comer adds associations to the mark, thereby weakening the strength of that mark for the first comer), tarnishment focuses on the quality of the associations made to the first comer. Specifically, tarnishment refers to situations where use by the second comer either causes consumer to attach a negative association to the first comer,\(^8\) and/or where such use "is likely to undermine or damage the positive associations evoked by the mark" and attached to the first comer.\(^8\) Tarnishment cases all reflect a focus on how the second comer's use of the mark impacts on the evaluations of the first comer.\(^8\)

Last, tarnishment bears a striking resemblance to disparagement ("a false statement of fact disparaging another's goods or services")\(^8\) which also involves an evaluative component. Except for the fact that tarnishment under the Federal Trademark Dilution Act applies only to famous marks, from a psychological perspective, there would seem to be little difference between

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84. "To prove a case of tarnishment, the prior user must demonstrate that the subsequent use is likely to the attention of the prior user's prospective purchasers and that the use is likely to undermine or damage the positive associations evoked by the mark." Restatement, supra note 41, §25, comment g.
85. 4 McCarthy, supra note 3, §24:104.
86. 4 McCarthy, id, §27:91 at 27-153.
tarnishment and disparagement. While the notions of secondary meaning, likelihood of confusion and genericism refer to the presence (or absence) and strength (or weakness) of associations or mis-associations, blurring, tarnishment and disparagement refer to weakening or reduction in the ability of the mark to clearly and unmistakably distinguish one source and thereby require the evaluation of the ability to make those associations. 86a

F. Implications for Measuring Dilution

As the Hershey Foods court commented: "There is [sic] no standard criteria for surveying for dilution." 86b The discussion just concluded yields several concrete suggestions as to appropriate measurement approaches and criteria, some of which differ for blurring and tarnishment. For either blurring or tarnishment, testing for dilution requires that several key questions be addressed. These include: Within what universe should it be tested (general public or niche market)? Which mark (plaintiff's, defendant's or both) should be tested? What elements need to be incorporated in the test protocol?

Is the proper universe the general public or a niche market? This question is yet to be decided definitively. Different courts have come down on both sides of the issue. 87

Whose mark should be tested? The Ringling Bros. court held "It is Ringling's famous mark that should be the focus of the dilution survey, for it is injury to that mark that is in issue." 88 The court even went so far as to suggest that instead of having respondents complete the phrase: "THE GREATEST _____ ON EARTH," it would have been better had they been shown a card displaying plaintiff's mark. 89 In this writer's opinion, while a focus on plaintiff's mark is required for assessing the fame of the mark at issue (the first prong of the empirical assessment), when assessing the degree to which there is a risk of blurring of distinctiveness (the second prong of the empirical assessment), the continued emphasis on testing plaintiff's mark may be misplaced. Consider the following rationale:

Regardless of whether the focus is on blurring or tarnishment, the federal dilution doctrine applies only to famous marks. Thus, dilution is a two-tiered concept. Before one can raise issues of

86a. Id, §§24:67-67 at 24-119 to 121.
86b. Supra note 38 at 518.
87. See supra notes 41 and 42 and accompanying text.
89. Id at 618 fn 23, 42 USPQ2d at 1170.
blurring or tarnishment, evidence first must be adduced to establish that the plaintiff’s mark is famous. Absent a showing of fame, questions of blurring or tarnishment become irrelevant. Although one may rely on other forms of evidence to establish fame (e.g., duration of use, duration and amount of advertising expenditures, licensing or co-branding relationships), these only provide indirect and sometimes misleading evidence of the consumers’ states of mind. To determine whether a mark truly is famous, the most direct evidence would come from a properly designed survey conducted with members of the relevant universe. Only after fame has been determined does it make sense to test whether that mark has been blurred or tarnished. The threshold issue of fame cannot be tested using defendant’s mark.

The Ringling court’s holding that blurring (the second tier issue) should be tested using plaintiff’s mark likely was a result of the case’s circumstances. Defendant’s mark (The Greatest Snow on Earth) was already widely known among the relevant populace because it was emblazoned on all the license plates in the State of Utah. Under these circumstances, it might be possible to assess impact of defendant’s mark by testing plaintiff’s mark. This approach, however, requires that one wait until after defendant’s mark comes to enjoy at least a certain measure of widespread use. Logically, if testing is done before defendant’s mark becomes known to members of the public, one could not expect it to exert much of an effect. However, if plaintiff’s mark is indeed famous, by this point, the horse is already out of the barn and plaintiff’s mark is likely to have suffered damage. To prevent such damage, plaintiffs need to be able to test for the likelihood of blurring either before or immediately after defendant’s mark has been introduced. Doing so requires determining whether exposure to defendant’s mark causes consumers to make associations to plaintiff and its mark, not the reverse. If exposure to defendant’s use of its mark produces no such associations, then where is the harm qua blurring? Thus, while fame (the first tier of dilution) needs to be tested using plaintiff’s mark, blurring (the second tier) likely is best tested using defendant’s mark as the latter is “used in commerce.”

A similar rationale with an added wrinkle applies to the test for tarnishment. Consumers may draw negative associations to plaintiff’s famous mark for many reasons, some or all of which may predate defendant’s use of its mark. If defendant’s use of its mark cannot be shown to be the cause of one or more of these negative associations, then where is the harm qua tarnishment? For this reason, as is the case with blurring, while fame needs to be tested using plaintiff’s mark and tarnishment needs to be tested
using defendant's mark. The wrinkle is that, that defendant's use of its mark must be shown to cause not just any association, but a negative association.

The author has employed the rationale outlined above in various surveys proffered as evidence in litigated matters. Because they provide concrete illustrations of the concepts outlined above, two of these studies are discussed below.

1. Testing Blurring of Distinctiveness

With the objectives of assessing confusion, the efficacy of disclaimers and dilution, the survey proffered in Pebble Beach Co. et al. v. Tour 18 I, Ltd. had several interwoven components. Relying on the findings pertaining to confusion, both the district court and Court of Appeals for the Fifth Circuit declined to discuss the dilution component. Yet, consideration of this approach is instructive.

Situated in Humble, Texas, a Houston suburb, Tour 18 I Ltd. designed and operated a regulation eighteen-hole golf course that consisted of topographical replicas of holes from thirteen golf courses situated across the United States. These courses included: Pebble Beach (California), Augusta (Georgia), Sawgrass (Florida), Shinnecock Hills (New York), Harbour Town (South Carolina) and Pinehurst (North Carolina). As preparation for constructing their course, Tour 18 videotaped and secured topographic maps of the original holes from outside sources. The replicas were reasonable simulations, down to including non-playing-related details. For example, among other features, Harbour Town's eighteenth hole is known for its location near a picturesque lighthouse on the Sea Pines golf course. Not only was its topography generally the same, but the Tour 18 version also included a replica of this lighthouse.

Among other arguments, plaintiffs Pebble Beach Company, Sea Pines Company, Inc. and Resorts of Pinehurst, Inc. contended that use of their names on defendant's promotional brochures and golf course would cause dilution via blurring. Accordingly, this author was retained to develop a survey to test both tiers of the dilution argument (fame + blurring).

The respondents consisted of those golfers who had played Tour 18 and used a credit card when making reservations.

90. 942 F Supp 1513 (SD Tex 1996), affd as modified 155 F3d 526, 48 USPQ2d 1065 (CA 5 1998).

91. There were two hundred thirty-five individuals randomly selected from a comprehensive listing of those who had used a credit card when booking a reservation to play at Tour 18. Most were from Texas, approximately twenty-five percent were from out-of-state. On average, the respondents reported golfing for approximately nineteen years; well over ninety percent reported golfing for more than five years. On average, the respondents
Interviewing was conducted by phone in two waves. Wave 1 tested for fame and included preliminary questions for assessing dilution. Wave 2 conducted approximately a week to ten days later, included the remaining dilution questions.

Assessing Fame: At the time, more than thirteen thousand regulation eighteen-hole golf courses were located within the United States. To determine whether plaintiffs' possessed famous marks, the survey began with the following question: "In your opinion, what are the most famous golf courses located within the United States? You can tell me up to five." In response to this open-ended question, Pebble Beach was the most frequently named course (by eighty-seven percent of the respondents); Pinehurst #2 was the fourth-most named course (by twenty-five percent) of the respondents. As the probability of any one of the thirteen thousand courses being named as one of the top five courses in the country is less than .0004 percent, beyond a doubt, plaintiffs' courses were considered famous by defendant's customers.

Open-ended questions generally probe only "top of mind" contents, the "most accessible" region of the mind (see Exhibit 1). Accordingly, those not mentioning one or both of these courses in answer to the open-ended question were then asked the following closed ended question: "Would you or wouldn't you rank (Pebble Beach; Pinehurst #2; Nathanville) among the 100 most famous golf courses within the United States, or you have no opinion on that?" In response, no-one said they would rank Nathanville (a control name for a non-existent course) among the one hundred most famous golf courses in the country. In contrast, when combined with the answers to the open-ended question, two hundred twenty-four of the two hundred thirty-five respondents (ninety-nine point six percent) said they would consider Pebble Beach to be among the one hundred most famous golf courses in the country. Ninety-two percent included Pinehurst #2.

Respondents were next asked "If you know, in what city or state is Pebble Beach (Pinehurst #2) located?" The answers revealed that not only did respondents consider these courses to be among the most famous golf courses in the country, but most (ninety-six percent for Pebble Beach and sixty-six percent for Pinehurst) also knew where these courses were located.

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reported having golfed approximately forty times during the preceding twelve months; only eleven percent reported having golfed fewer than ten times during this twelve-month period. The majority (sixty-eight percent) had golfed at Tour 18 two or more times; most (ninety percent) said they were likely to return (thereby qualifying both as past and prospective users of defendant's course).

In terms of our prior discussion, via the first, open-ended question, the respondents were asked to activate their “golf course” cognitive networks. Quite likely, these cognitive networks contained many common nodes, including: greens, sand traps, club houses, golf carts, pro shops, etc. The word “famous” in the question further prompted the respondents to call forth only certain nodes within their “golf course” networks, namely, those that contained the names of what they considered to be “famous” golf courses. Since no specific names were mentioned in the question, the direction of flow within the respondents’ networks was from the generic hub or sub-category “famous golf courses” to nodes they considered to be exemplars of that category.

Of course, it also is possible for the flow to be activated in the other direction, that is, from the specific mark to a node encapsulating its meaning. Consider one commentator’s caution: “It is submitted, however, that protection from dilution must be limited to that appreciable sector of the market in which, abstractly, a brand has only one import.”93 Presumably, a brand’s import could be accomplished by showing plaintiff’s mark and then asking respondents what they associate to this mark. Two reservations remain, however. First, asking respondents to indicate the meaning of a mark is a less stringent approach than simply asking the respondent to identify famous exemplars of the category at issue because it supplies the mark to the respondent rather than having it evoked in the respondent’s mind. Second, when providing marks that are widely acknowledged to be famous, respondents may legitimately evoke many associations to that mark (e.g., soft-drink, drug, and coal for “Coke;” or an upscale retailer, colored glass lamp shades and the first name of a particular rock singer for “Tiffany.”) Some associations may be generated even to competing marks (e.g., “Coke” may elicit an association to “Pepsi”). Interpreting such responses may prove problematic. Notwithstanding these reservations, from a cognitive network perspective, providing respondents with a mark and asking them to associate it with a node encapsulating its meaning appears to represent a viable possibility.

Last, in the present instance, the fame of plaintiffs’ marks was tested on defendant’s customers. No doubt, fame could also have been assessed with varying results among the successively broader universes of plaintiffs’ customer base, golfers in general, and the adult population at large.

Assessing Blurring of Distinctiveness: Inasmuch as Pebble Beach and Pinehurst #2 qualify as two of the most famous service

93. Swann, supra note 75 at 857.
marks for golfers, the Second Tier issue becomes: To what extent, if any, had the presence of Tour 18 and its promotional materials caused a “weakening of associations,” a “blurring of distinctiveness” or a “whittling away of the identity and hold on the public mind” of these famous marks? This issue was addressed via questions asked during the initial interview and in a follow-up interview conducted a week so later.

In the initial interview, respondents were asked:

Before you heard about Tour 18, did you think you could play a hole called the 14th hole at Pebble Beach only at the Pebble Beach Golf Links in California (the 3rd hole at Pinehurst only at Pinehurst in North Carolina), or did you also think you could play it somewhere else?

Relying only on the answers of those who had earlier indicated they knew where each course was located, the findings were as follows:

<table>
<thead>
<tr>
<th>Respondents knowing location of:</th>
<th>Pebble Beach</th>
<th>Pinehurst</th>
</tr>
</thead>
<tbody>
<tr>
<td>(n = 226)</td>
<td></td>
<td>(n = 156)</td>
</tr>
<tr>
<td>Who answered:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>“only at . . .”</td>
<td>73%</td>
<td>76%</td>
</tr>
<tr>
<td>Pebble Beach</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pinehurst</td>
<td>7%</td>
<td>6%</td>
</tr>
<tr>
<td>“somewhere else”</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Thus, for those respondents who knew where these courses were located, approximately three out of four answered that before they had heard of Tour 18, they thought they could play a Pebble Beach hole only at the Pebble Beach course in California and a Pinehurst hole only at Pinehurst course in North Carolina. Inasmuch these respondents had played Tour 18 (where two of the holes were identified as the Pebble Beach 14th hole and Pinehurst No. 2’s 3rd hole), this might be taken as an indication of a “blurring of distinctiveness” or “whittling away of the identity and hold on the public mind” for these famous holes. Whereas approximately seventy-five percent of these respondents previously associated these holes with only one course, now they associated them with two courses.

Conducted between seven to fourteen days later, the second interview approached blurring in a slightly different way. Before being told anything that identified the second wave as being connected with the first, respondents were asked the following questions: “Do you know of any regulation 18-hole golf course
outside of California that identifies one of its holes as a Pebble Beach hole? [If yes:] What is the name of that golf course?” Comparable questions were asked regarding the Pinehurst hole. Though the first of these questions is worded differently, it poses essentially the same question asked during the first wave, namely, “Do you know of somewhere else?” The data below are based on the one hundred and sixty-four respondents who could be reached for the second wave. The follow-up questions provided an opportunity for respondents to identify more than one course. In response to “What is the name of that golf course?” everyone who answered “somewhere else” then identified only a single course, Tour 18.

Respondents knowing location of:

\begin{itemize}
  \item Pebble Beach
  \item Pinehurst
\end{itemize}

Percent answering “somewhere else”

\begin{itemize}
  \item From interview #1: 7% 6%
  \item From interview #2: 85% 72%
  \item Difference 78% 66%
\end{itemize}

In other words, only six percent to seven percent said that, prior to learning of Tour 18, they thought they could play these two holes “somewhere else.” After becoming aware of Tour 18, the majority (seventy-eight percent to sixty-six percent) now said they could play these holes “somewhere else,” specifically, at Tour 18 in Humble, Texas. Whereas, prior to Tour 18, hearing of the 14th hole at Pebble Beach or the 3rd hole at Pinehurst No. 2 evoked associations only to the famous golf courses with these names in their cognitive networks, upon now hearing of either of these holes, associations were also evoked to Tour 18.

According to the House Report accompanying the Dilution Act, a claim for dilution “applies when the unauthorized use of a famous mark reduces the public’s perception that the mark signifies something unique, singular or particular.” The approach and findings just discussed to provide compelling evidence that defendant’s “unauthorized use of [plaintiff’s] famous mark reduce[d] the public’s perception that the mark signifies something unique, singular or particular,” thereby causing dilution qua a blurring of distinctiveness.

Last, when asserting a Dilution Act claim, plaintiff is entitled to relief only if defendant’s use began “after the [plain-
While such was the case here, it may not always be as easy to establish fame at some earlier point in time. This suggests that, as a safeguard against any future diluting activities by others, rather than being forced into a position where they must struggle to do so retrospectively at some later point in time, those believing they possess a famous mark might consider commissioning research to establish fame at the present time.

2. Testing Tarnishment

Tarnishment presents a different set of issues in preparing a survey. One commentator has noted: “A pre-FTDA example of the survey offered on the issue of tarnishment is found in Anheuser-Busch, Inc. v. Balducci Publications.”96 Designed and implemented by the present author and relied upon by the Eighth Circuit Court of Appeals, that survey also had several interwoven components, including confusion and tarnishment.97

In 1988, as a line extension of their Michelob beer, Anheuser-Busch introduced a version under the name “Michelob Dry.” Advertising for this product usually contained the slogan “One taste and you’ll drink it dry.”97a This phrase also appeared on all packaging and labeling for the product.

Balducci published and distributed a St. Louis newspaper-like tabloid named Snicker. Though consisting primarily of cartoons, Snicker also contained several legitimate advertisements. Provided within this context, one issue of the newspaper features on the outside back page a full-page illustrated advertisement for a fictitious beer named “Michelob Oily.” The top half showed a hand holding a beer can (in dress similar to Michelob Dry, but identified as Michelob Oily) out of which poured a black fluid. In large type around this depiction was the phrase “One taste and you’ll drink it oily.” Immediately below, in the stylized font used by Anheuser-Busch for this brand, the largest type on the page contained the name Michelob Oily. At the bottom of the page was a large A and Eagle mark similar in appearance to that used by Anheuser-Busch. Below this were the words: “At the rate it’s being dumped

96. W.G. Barber, How to Do a Trademark Dilution Survey (or Perhaps How Not to Do One), 89 TMR 616, 621 (1999); Anheuser-Busch, Inc. v. Balducci Publications 28 F3d 769, 31 USPQ2d 1296 (CA 8 1994), revg 814 F Supp 791, 26 USPQ2d 1180 (ED Mo 1993), cert denied, 513 US 1112 (1995). The claim to dilution was brought under Missouri’s anti-dilution statute because the case was commenced prior to adoption of the FTDA.
97a. Anheuser-Busch, supra note 96 at 772, 31 USPQ2d 1296.
into our oceans, lakes and rivers, you’ll drink it oily sooner or later, anyway.”

Here, fame of plaintiff's mark was not empirically assessed via consumer research, but was established based upon other criteria such as advertising expenditures. Hence, relying on the assumption that fame could readily be established via other means, the question at issue was tarnishment.

Assessing Tarnishment: The “study was designed to determine whether (and if so, to what extent) readers of the aforementioned Snicker ‘Michelob Oily’ communication . . . had their beliefs regarding either Michelob and/or Anheuser-Busch, and/or their purchase intentions regarding products emanating from either of these entities, tarnished as a result of reading said communication.” The focus was not on whether the respondents simply made associations between defendant’s use of its mark and plaintiff. Rather, it was on the impact that those associations exerted on their evaluations of, and purchase intentions regarding, plaintiff and its products.

The three hundred and one respondents all lived or worked in metropolitan St. Louis, said they read or looked through newspapers or magazines at least once a week, and they had purchased and consumed beer during the preceding six months. Of these, two hundred saw the offending Michelob Oily communication; as a control, one hundred and one saw an authentic Michelob Dry advertisement. All were asked the same post-exposure questions.

The interview began with three open-ended questions designed to assess top-of-mind meanings communicated. “What was the main idea of the ad/communication you just looked at? Please tell me everything else you can remember that the ad/communication said showed or meant to you. Anything else?” Whereas none of the respondents shown plaintiff's Michelob Dry ad answered these questions by associating a negative meaning with Michelob or Anheuser Busch, thirty-seven percent of those shown defendant's Michelob Oily communication provided such negative associations. Thus, even if one were to rely only on these data (gathered via open-ended questions which generally probe only “top of mind” or “most accessible” contents of the mind, one could conclude that exposure to defendant's Michelob Oily communication was likely to cause a substantial proportion of consumers to draw negative associations to plaintiff's mark and “obviously tarnishes the

97b. Ibid.
99. “Intentions” is a subsequent step along the Hierarchy of Effects. See Jacoby and Szybillo, supra note 26 at 224.
99a. See Exhibit 1 and supra note 8.
mark’s continually-developed images. Moreover, the tarnishment results from a negative, although vague, statement about the quality of the product represented by the trademark.99b

To determine the impact if any, on purchase intentions, the subsequent closed-ended question asked: “As a result of seeing this material, would you be more likely or less likely to buy Michelob beer, or wouldn’t it matter?” While seven percent of those exposed to plaintiff’s Michelob Dry ad answered “less likely,” twenty-two percent of those exposed to defendant’s Michelob Oily communication answered “less likely.” The subsequent question asked: “As a result of seeing this material, would you be more likely or less likely to drink Michelob beer, or wouldn’t it matter?” While five percent of those exposed to plaintiff’s Michelob Dry ad answered “less likely,” twenty percent of those exposed to defendant’s Michelob Oily communication answered “less likely.” Regardless of whether the question asked about purchase (“buy”) intentions or consumption (“drink”) intentions, exposure to defendant’s communication caused a fifteen percent drop in positive intentions towards plaintiff’s product.

To determine whether the “Oily” communication or the process of participating in the interview was affecting more than evaluations and intentions, respondents in both groups were asked: “Based on what you see here, does this page say or suggest to you that Michelob beer now costs more, Michelob beer now costs less, or [it] doesn’t say or suggest anything about how much Michelob beer costs?” Approximately ninety percent of the consumers in each group answered that the communication they saw “doesn’t say or suggest anything about how much Michelob beer costs.” Thus, defendant’s communication did not exert any differential effect on “control” information, that is, information not present in either communication.

As a last tarnishment question, all respondents were asked “Does this ad/communication say or suggest to you that Michelob beer is or was in some way contaminated with oil, Michelob beer isn’t or wasn’t in some way contaminated with oil, or [does it say or suggest nothing about whether Michelob beer was contaminated with oil]?” As compared to one percent of those exposed to plaintiff’s Michelob Dry ad, fifty-five percent of those exposed to defendant’s Michelob Oily communication said that the communication they saw said or suggested that “Michelob beer is or was in some way contaminated with oil.”99c

99b. Anheuser-Busch, supra note 96 at 777, 31 USPQ2d 1296.
99c. Id at 773, 31 USPQ2d 1296.
Consistent with answers given to the open-ended questions, the answers to the closed ended questions reveal a clear pattern of defendant's Michelob Oily communication causing those exposed to it to draw negative associations to plaintiff's mark and "to undermine or damage the positive associations evoked by [plaintiff's] mark." Since being exposed to defendant's communication caused more than fifty percent of the respondents to develop such negative associations, it was concluded that compelling evidence had been adduced showing tarnishment.

3. A Comment on Controls

The consideration of cognitive networks also provides guidance on the "controls" to use when assessing blurring of distinctiveness.

By definition, a famous mark represents a hub node that evokes a highly similar and singular cognitive network in minds of a large proportion of the relevant public. Whether one chooses to provide consumer survey evidence on this question (as was the case in Pebble Beach) or offer other, less direct evidence (as was the case for Michelob Dry), in essence, the famous mark (for example, Cartier; Gucci; Mercedes) has already been tested by time. It already evokes a highly similar and singular cognitive network in the minds of a large proportion of the public and establishes the standard against which defendant's mark can be compared. For any test of blurring, the essential question is whether defendant's mark causes the same singular cognitive network to be evoked in the minds of the relevant public.

When testing defendant's mark, essentially, the ability of this "test" stimulus to cause evocation of that cognitive network is being compared to the original. In a very real sense, the original serves as the "control." It matters not whether other marks may yield similar findings; if used in commerce, they may become actionable as well. Precisely this issue surfaced in NFL Properties v. ProStyle.

As with Pebble Beach and Michelob, the survey proffered in NFL Properties v. ProStyle\(^{100}\) had several interwoven components, two of which were to assess dilution and likely confusion. A total of six hundred and forty-eight respondents were tested in three Wisconsin cities (Green Bay, Appleton and Milwaukee) as well as in Chicago, Illinois and Minneapolis Minnesota. Approximately half were tested using three of defendant's as-sold gar-

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100. J. Jacoby, The Extent to which Green and Yellow, when Seen in the Context of Other Pertinent "Cues," Have Acquired Secondary Meaning and are Likely to Cause Consumer Confusion, April 1997.
ments, with more than one hundred respondents tested on each of defendant's three shirts. To be used when assessing confusion, the other half were tested on corresponding "control" garments. As with defendant's test garments, more than one hundred respondents were tested on each of the control shirts. These shirts faithfully mimicked defendant's garments in all respects except one. In two instances, the name "Green Bay" was replaced with the name "Ellison Bay." In the third, the colors were changed from green and yellow printed on a gray shirt containing large football player-identifying numerals to red printed on a light blue shirt from which the numerals had been removed.

For reasons explained by the court in its Preliminary Injunction opinion, data obtained from the questions assessing likely confusion were not admitted. Other than later questions assessing consumer interest in sports and purchase behavior, this left Question 1 as the only substantive question. After being provided with as much time as they wished to examine the garment they were handed, Question 1 asked: "What, if anything, do you think of when you see this shirt?" As dilution was tested using only two of defendant's three shirts, attention is limited to these data.

In response to this open-ended question, seventy-one percent of respondents shown defendant's first shirt and sixty-four percent of respondents shown defendant's second shirt answered that the shirt they examined caused them to think of the Green Bay Packers and/or the National Football League. Testing defendant's garments/marks thus found that they evoked respondent's "Green Bay Packers/NFL" cognitive networks among more than two thirds of the respondents. Based on these data, plaintiff argued there was compelling evidence of dilution. The court held otherwise and excluded this evidence. Recall that the control shirts were never "used in commerce," but were created by this

101. The Preliminary Injunction and Trial on the Merits opinions by the district court in NFL Properties v. ProStyle court contained a number of negative views regarding this author's prior research and the study being proffered in that matter. It is submitted that, while a court certainly is entitled to its conclusions, when published opinions contain numerous factual errors and display an ignorance of accepted scientific procedure, this harms both the judiciary and the search for justice.

102. One of these shirts came in precisely the same green and yellow colors as used by the Green Bay Packers, contained the name "Green Bay," an embossed football helmet on front and numerals on the back. The second shirt also came in precisely the same green and yellow colors as used by the Green Bay Packers, contained the name "Green Bay," had a large letter P on the front and numerals on the back.

103. It appears safe to assume that had plaintiff's garments been tested, they would have caused association levels at least as high, and probably higher.

104. Though the court would not permit this evidence to come before the jury, in finding for the plaintiff, the jury held otherwise.
researcher for the express purpose of being used as controls for assessing likelihood of confusion. However, because they also generated high (albeit nowhere near as high) levels of association with the Green Bay Packers and/or the National Football League, the court held that they essentially served as controls for assessing dilution. It is submitted that, for reasons discussed below, the logic of this argument fails.

First, the Dilution Act states that plaintiff’s are entitled to an injunction when another’s “commercial use in commerce of a mark or trade name” is shown to be the cause of dilution. In other words, tests of blurring or tarnishment need to test marks as used in commerce, not researcher-developed marks created for a purpose having nothing whatever to do with commercial use.

Second, had these researcher-created marks been used by some party in commerce and been shown to cause high levels of association with plaintiff’s marks, then they would have become the focus of another lawsuit. Just as one cannot use another confusing mark as a control in a likelihood of confusion test, one cannot use another diluting mark as a control in a dilution test. Plaintiff always has the option of pursuing any third, fourth, or nth comer.

The reader is asked to envision a universe of possibilities from a dozen actual and potential shirts are taken, as indicated below. These twelve shirts reflect a spectrum ranging from a plain white dress shirt with nothing on it at one end (#1), to an authorized Green Bay Packers tee shirt (#12) at the other. The likelihood that a white dress shirt would cause respondents to evoke their Green Bay Packer/NFL cognitive networks is so small that, for all practical purposes, it can be assumed to be zero. The same would be true for the plain white tee shirt (#2) as well as for the white tee shirt containing the name Mumford H.S on the front and Cowboys on the back (#3). However, the closer a shirt’s colors and indicia come to those on the authorized shirt, the greater becomes the likelihood that such a shirt would activate the respondents’ Green Bay Packers/NFL cognitive networks. Substituting the words “Groin” and “Groan” for “Green,” shirts #8 and #9 illustrate shirts that might cause tarnishment. Shirts #10 and #11 correspond to those manufactured and sold by defendants.

<table>
<thead>
<tr>
<th>Shirt</th>
<th>Type</th>
<th>Color(s)</th>
<th>Name on front</th>
<th>Other indicia</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Dress</td>
<td>white</td>
<td>none</td>
<td>none</td>
</tr>
<tr>
<td>2</td>
<td>Tee</td>
<td>white</td>
<td>none</td>
<td>none</td>
</tr>
<tr>
<td>3</td>
<td>Tee</td>
<td>white</td>
<td>Cowboys</td>
<td>Mumford H.S. on back</td>
</tr>
<tr>
<td>4</td>
<td>Tee</td>
<td>blue &amp; white</td>
<td>Dallas</td>
<td>Cowboys on back</td>
</tr>
</tbody>
</table>
### Shirt Type Color(s) Name on front Other indicia

<table>
<thead>
<tr>
<th>Shirt</th>
<th>Type</th>
<th>Color(s)</th>
<th>Name on front</th>
<th>Other indicia</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Tee</td>
<td>blue &amp; white</td>
<td>Ellison Bay</td>
<td>Football helmet on front</td>
</tr>
<tr>
<td>6</td>
<td>Tee</td>
<td>yellow &amp; brown</td>
<td>Ellison Bay</td>
<td>Football helmet on front</td>
</tr>
<tr>
<td>7</td>
<td>Tee</td>
<td>green &amp; yellow</td>
<td>Ellison Bay</td>
<td>P on front</td>
</tr>
<tr>
<td>8</td>
<td>Tee</td>
<td>green &amp; yellow</td>
<td>Groin Bay</td>
<td>Football helmet on front</td>
</tr>
<tr>
<td>9</td>
<td>Tee</td>
<td>green &amp; yellow</td>
<td>Groan Bay</td>
<td>Football helmet on front</td>
</tr>
<tr>
<td>10</td>
<td>Tee</td>
<td>green &amp; yellow</td>
<td>Green Bay</td>
<td>Football helmet on front</td>
</tr>
<tr>
<td>11</td>
<td>Tee</td>
<td>green &amp; yellow</td>
<td>Green Bay</td>
<td>P on front</td>
</tr>
<tr>
<td>12</td>
<td>Tee</td>
<td>green &amp; yellow</td>
<td>Green Bay</td>
<td>Packers on rear</td>
</tr>
</tbody>
</table>

Shirt #7 corresponds to one of the shirts this author created to serve as a “strong control” when assessing confusion. Except for substituting the term Ellison for Green, this shirt was identical in all other respects to one of defendant’s garments (#11). Few, if any, respondents were expected to be confused into thinking that a shirt with the name Ellison Bay came from or was authorized by the Green Bay Packers and/or the NFL. This expectation was confirmed. While thirty-two percent gave such an answer for shirt #11, only one and one-half percent gave such an answer for shirt #7, with the net difference (over thirty percent) generally being sufficient to reflect an actionable level of likely confusion.

According to the statute, dilution of the distinctive quality of a mark can occur “regardless of the presence or absence of [a] likelihood of confusion, mistake or deception.” Though shirt #7, if used in commerce, may cause few, if any, consumers to be confused, it may still cause dilution (qua blurring) of plaintiff’s mark for great numbers of consumers. The capacity to dilute is independent of the capacity to confuse. The fact that shirts can be envisioned and devised that may cause as much or more dilution than defendant’s marks should have no bearing on whether action can be taken against defendant’s mark. If and when such devised marks are used in commerce, plaintiff would be fully justified in pursuing the users of such marks as well.

### G. Parallels and Difference in Assessing Confusion and Dilution

For many matters, both confusion and dilution require two-tiered tests. As discussed, in matters involving dilution, one first must establish fame before it makes sense to test for either blurring or tarnishment. Similarly, for marks that are neither fanciful nor arbitrary, one first must confirm secondary meaning before it makes sense to test for a likelihood of confusion. In many instances, the first tier (either fame in a dilution matter or...
secondary meaning in a confusion matter) is assumed, or may be argued on the basis of indirect (non-consumer) evidence.

When testing trade dress, assessing fame or secondary meaning of the dress requires that all other source-identifying indicia (e.g., brand name, name of the manufacturer, logos, etc.) be removed from plaintiff's dress. Otherwise, identification with the correct source might simply be a matter of respondents attending to these other indicia rather than to the trade dress. On the other hand, testing for dilution (qua blurring) or a likelihood of confusion both require that defendant's product be unmodified and tested as they appear in the marketplace.

In Hershey Foods Corp. v. Mars, Inc. a study was designed in which color-faithful replicas were prepared of the front panel of packages of Reese's Peanut Butter Cups and five other chocolate and peanut candies to adduce evidence regarding fame. As the issue concerned only the particular shades and combinations of colors, to avoid type size, angle or style of type, number of letters or any other visual features to serve as a basis for respondents inferring the brand name and making a correct identification, these features were all replaced by the name "Brand X" placed horizontally on each bar. Under these conditions, since ninety-four percent of the respondents correctly identified the Reese's replica, the court agreed that the survey provided ample evidence to qualify Reese's trade dress as being famous.

A second group was used to test the blurring of distinctiveness alleged by that plaintiff alleged was being caused by M&M Mars' use of the same color on packages of M&M's Peanut Butter chocolate candies. The procedures and questions were all the same, except for the fact that, for this group, a color-faithful replica of the M&M's package was substituted for the color-faithful replica of the Reese's Peanut Butter Cups package. While only seven percent of the respondents correctly identified the replica of the M&M's Peanut Butter package, fifty-one percent misidentified it as a package of Reese's Peanut Butter Cups. Asserting that the modifications made to create the M&M's Peanut Butter replica package may have misled the respondents, the court held there was no proof of dilution. In essence, the court's holding focused on the language in the Dilution Act that states that plaintiff's would be entitled to an injunction when another's "commercial use in commerce of a mark or trade name" was

105. Supra note 38.

106. (The other candies were Nestle's Butterfinger and Crunch bars, Hershey's Skor, Goldenberg's Peanut Chews and Milka, a chocolate bar from Germany not sold in the United States.)

106a. Hershey Foods, supra note 38 at 511, 515.
shown to be the cause of the dilution. In other words, just as is the case for tests of likelihood of confusion, tests of either blurring or tarnishment must utilize defendant's mark as it is used in commerce.

H. Disclaimers as a Remedy for Confusion and Dilution

Evidence shows that disclaimers typically have either little or no effect in reducing or eliminating confusion. Indeed, when consumers simply glance at the disclaimer, the likelihood of confusion may even be increased. It is not surprising, then, that some courts have exhibited a hostility toward the use of disclaimers as a remedy for likely consumer confusion.

Should a court consider imposing a disclaimer in a dilution matter? An understanding of how cognitive networks operate suggest that employing a disclaimer as a remedy in a dilution case would produce an opposite effect to that intended.

Consider the advertising slogan, "Not your father's Oldsmobile" used by Oldsmobile and the name "notHarvard.com," formerly used by a firm active in supplying online educational services to corporations. The trademarks "Oldsmobile" and "Harvard" possess universal fame, in that both are known to the vast majority of consumers and non-consumers of the products and services offered under these marks. Thus, it can be assumed that the marks will evoke pre-existing cognitive networks (those for Oldsmobile and Harvard) in the minds of readers and listeners. In both instances, to understand the meaning of "not" requires that one first understand the term to which it is attached. In the case of "Not your father's Oldsmobile," the Oldsmobile company is the only source involved. Hence, any evocation of a pre-existing Oldsmobile cognitive network is not harmful and may even be seen as being beneficial. However, while the term "not" in the name "notHarvard" may (or may not) be sufficient to preclude

106b. Id at 503.
108. See, eg, Pebble Beach, supra note 90 ("inconspicuous disclaimers" did not avoid likelihood of confusion); Home Box Office, Inc. v. Showtime/Movie Channel, Inc., 832 F2d 1311, 4 USPQ2d 1789 (CA 2 1987) (burden is on infringer to prove that disclaimer would significantly reduce likelihood of confusion); E. & J. Gallo Winery v. Gallo Cattle Co., 955 F2d 1327, 21 USPQ2d 1824 (CA 9 1992), amended 967 F2d 1280 (CA 9 1992) (confusion increased through use of disclaimer); see 17 Journal of Public Policy and Marketing 97.
confusion, because it necessarily calls to mind at least some core nodes associated with the consumer’s “Harvard” cognitive network, the term “not” is insufficient to preclude dilution. Indeed, understanding how cognitive networks operate suggests that a disclaimer would have just the opposite effect. Thus, it may be impossible to meaningfully employ a disclaimer remedy to counteract the dilution of a famous mark.

V. CONCLUSION

It is undeniable that Sections 43(a) and 43(c) of the Lanham Act focus upon consumer psychological processes and states of mind. Indeed, without reference to the psychology of consumers, these sections of the Lanham Act possess little or no meaning.

There was a point in time when those practicing, litigating or adjudicating trademark law had to rely on common sense or speculation regarding how the consumer’s mind operates. However, as new findings regarding cognitive processes are adduced and then replicated by subsequent psychological, cognitive and neurological research, there is less justification for continuing to do so. Those willing to devote the time and effort to understanding these scientific concepts and related findings are likely to acquire a better understanding of the scientific foundations that exist to support trademark law and practice. At the very least, armed with such background, they will be better able to avoid falling prey to unreliable intuition or those who promulgate “junk science.”

108. One can envision circumstances where some readers may interpret “notHarvard” to mean off-campus educational services offered by Harvard University that are outside the line of traditional Harvard offerings.
EXHIBIT 1: Using a cognitive network* in memory to interpret the outside world.

*NOTE: The simplified cognitive network is likely a substantial simplification of those that exist in the minds of NFL football fans.
EXHIBIT 2: Depicting Dilution

OUTSIDE WORLD

1. Football jersey
2. Says "Green Bay"
3. Yellow & Green colors

GARMENT ATTRIBUTES:

PSYCHOLOGICAL WORLD

MEMORY

"Green Bay Packers" Cognitive Network

Merchandise not from or connected with the "Green Bay Packers"

ELICITS

Cognitive Workspace

"Green"
"Bay"
"Football jersey"
"Yellow & Green colors"