This Article proposes that memetic theory is a useful lens through which to view trademarks, particularly as there has been a rise in the number of applications for culturally-driven words and catchphrases in the United States Patent and Trademark Office. Memetic theory, or memetics, is a scientific field related to how units of information evolve and replicate. These units of information, called memes, undergo a process of natural selection comparable to that of genes. To survive as trademarks, memes must not only exist in the proper form, but they must also subsist in an environment where replication, variation, and selection exist in appropriate measure. Under current trademark jurisprudence, over-protection and over-enforcement of trademarks pose a threat to the natural selection environment. The recent phenomenon of trademark applications for culturally driven words and catchphrases is but one manifestation of the interaction between memetic theory and trademark law. Applying memetics to trademark law calls for a reassessment of current legal standards. This Article concludes by offering further insight into where to explore the intersection between this incipient science and trademark law.
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MEMETIC THEORY, TRADEMARKS & THE VIRAL MEME MARK

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INTRODUCTION

The race to the United States Patent and Trademark Office (“USPTO”) has begun. Should Trayvon Martin’s mother (or anyone else) be able to file trademark applications for phrases using his name, such as JUSTICE FOR TRAYVON or I AM TRAYVON?1 If Disney Enterprises, Inc. applies to register SEAL TEAM 6 as a trademark less than twenty-four hours after Osama bin Laden’s death, should it be accorded protection?2 And, if protection is proper, should Disney have priority over the five other applicants seeking to register the same phrase?3 Among thirty applicants, how many should be awarded trademark protection for a 9/11 victim’s highly publicized last words, LET’S ROLL?4 Should the USPTO examine trademark applications for SHOCK AND AWE, the widely-known phrase describing a military doctrine that the Bush Administration publicly suggested would end the 2003 Iraq invasion?5 While the USPTO does not keep official statistics on such trademark applications, it is widely understood that the possibility of exclusive, national rights in media-amplified words and catchphrases has created a veritable race to the trademark office among both entrepreneurs and opportunists seeking to harness the strength of media publicity.6 A number of questions arise in addressing this recent and increasingly prevalent phenomenon. What makes certain words and phrases replicate through the masses so quickly, and how can we characterize them? Should we treat applications for such words and phrases differently from any other trademark applications in the USPTO? Does trademark law adequately address the protection of such designations? Should we revisit current trademark standards as social media, the Internet, and information transmission rapidly change and collide with the historical underpinnings of the law?

Two phenomena exist at the intersection of our nation’s infatuation with instant information, social media, and viral7 news: (1) transient fame for the subjects of the

1 See infra Part IV.A.4.
2 See infra Part IV.A.3.
3 Id.
4 See infra Part IV.A.1.
5 See infra Part IV.A.2.
6 Tim Newcomb, Q&A: How Can Someone Trademark ‘Occupy Wall Street’?, TIME (Oct. 27, 2011), http://newsfeed.time.com/2011/10/27/qa-how-can-someone-trademark-occupy-wall-street. Cynthia Lynch, the administrator for Trademark Policy & Procedure at the USPTO, has anecdotally stated in interviews that, “when there is a catchphrase or a quote or something prominent in the news, in many instances we see one or multiple parties apply for a trademark for it in close proximity.” Id.
7 See DANIEL J. SOLOVE, THE FUTURE OF REPUTATION: GOSSIP, RUMOR, AND PRIVACY ON THE INTERNET 124 (2007) (suggesting information goes “viral” when it spreads rapidly to a broad audience through preexisting social networks, the Internet, or other technologies); Kevin Wallsten,
underlying event and (2) words and catchphrases that become inextricably linked to that event. Regarding the former, these subjects generally fade from the public eye very quickly. In contrast, the immediate amplification of words and catchphrases—through news outlets, social media, and other public forums—occasionally results in the formation of cultural icons. The public and media frequently adopt these words and catchphrases so significantly that they enjoy much longer temporal presences in the minds of the public than the singular viral news event.

This popularity meets the law when federal trademark applications for society-driven words and catchphrases appear immediately after the media and public popularize the words. The applicants may or may not be connected to the corresponding triggering event and in nearly every instance have neither “created” the words and catchphrases nor their popularity through the traditional means of marketing, advertising, or even use. Without a timely and thoughtfully attuned response to this rising phenomenon, trademark protection for such words and catchphrases could create competition barriers, stifle communication, and ultimately run afoul of the overarching social function of trademark law.

Trademark law’s social function acknowledges that trademarks may have dual meanings—one related to appropriation for specific use in trade and another based on localized use in the day-to-day lives of individuals. Not only do trademarks provide the commercial benefit of identifying the sources of products, they also have significant societal and cultural value. This social function proposes that society in

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"Yes We Can": How Online Viewership, Blog Discussion, Campaign Statements, and Mainstream Media Coverage Produced a Viral Video Phenomenon, 7 J. INFO. TECH. & POL. 163, 163 (2010) (describing viral videos as “online video clips that gain widespread popularity when they are passed from person to person via e-mail, instant messages, and media-sharing Web sites”).

See discussion infra Part IV.


See discussion infra Part IV.

See infra Part IV.

See Kenneth L. Port, The Congressional Expansion of American Trademark Law: A Civil Law System in the Making, 35 WAKE FOREST L. REV. 827, 828 (describing economic, social and legal rationales of trademark law). Exploring all of these functions in detail is beyond the narrow scope of this article, and it is the goal to analyze the broader questions in later work.


Id.; Port, supra note 15, at 894.
its entirety has an interest in using the cultural and expressive facet of some trademarks.\textsuperscript{18} However, as safeguards for trademark owners increase (typically through marketing, advertising, use, and brand loyalty), the space left over for the societal dimension declines.\textsuperscript{19} The expansion of trademark protection has significantly weakened the social function of trademarks, particularly as the value of trademarks has exploded in recent years.\textsuperscript{20}

Much has been written about the value of trademark protection in the commercial marketplace.\textsuperscript{21} Among the factors that may impact the success of a particular trademark are advertising\textsuperscript{22} and the consumer’s perception of a product’s quality, which encompasses “its characteristics, perceived image, and the emotional connection between the mark and the general public.”\textsuperscript{23} It is unsurprising, therefore, that businesses and individuals would seek to ride the waves of viral publicity in adopting and applying for trademarks. One scholar, Barton Beebe, has termed such society-driven trademark applications “meme mark” filings, in which opportunists hurry to appropriate words and catchphrases after their amplification in traditional or social media.\textsuperscript{24} Beyond the characterization of such applications as meme mark filings, however, current trademark scholarship has not yet explored this phenomenon, although memetics has been used to explore other legal issues.\textsuperscript{25} As

\textsuperscript{18} Port, \textit{supra} note 15, at 895. Professor Port further notes that,

\begin{quote}
[Although the well settled doctrine states that a trademark holder ought to enjoy the right of excluding others from using even an iconic trademark to prevent confusion, mistake, or deception as to the source or origin of the goods or services on which it uses the trademark, where no confusion is likely, protecting the trademark holder likely gives the holder a monopoly right in uses of that iconic mark that should rightfully be shared by all. It should be shared by all, of course, because society at large played a large role in making it a cultural icon.

\end{quote}


\textsuperscript{20} Id., supra note 15, at 830.

\textsuperscript{21} See, e.g., Doris E. Long, \textit{Is Fame All There Is? Beating Global Monopolists at Their Own Marketing Game}, 40 \textit{GEO. WASH. INT’L L. REV.} 129, 127 (2006) (footnotes omitted) (noting that legal scholars have generally assigned the following values to trademarks: “source designators, manifestations of goodwill, cultural icons, consumer information signalers, semiotic signifiers, and competitive regulators”).

\textsuperscript{22} See, e.g., Dreyfuss, \textit{supra} note 18, at 424 (explaining the relationship between advertising and universal familiarity).

\textsuperscript{23} Long, \textit{supra} note 21, at 128 n.20 (citations omitted).


\textsuperscript{25} A handful of legal scholars have used memetics to analyze legal issues, most often with respect to copyright law. See Thomas F. Cotter, \textit{Memes and Copyright}, 80 \textit{TUL. L. REV.} 331, 347 (2005) [hereinafter Cotter, Memes]; Thomas F. Cotter, \textit{Prolegomenon to a Memetic Theory of Copyright: Comments on Lawrence Lessig’s The Creative Commons}, 55 \textit{FLA. L. REV.} 779, 780 (2003)
Professor Beebe alludes, memetics (the study of how memes evolve and replicate) may provide some insight into this new development in the trademark arena. This article builds on Professor Beebe’s observations and develops a full analysis of memetic theory as a way of deconstructing the adoption, protection, and success of trademarks.

Memetics is an incipient field of study related to how cultural information evolves and is transmitted. These informational units, called memes, are the cultural parallel of genes. When one person imitates another person, some item (what we call the “meme”) is passed to that person. This meme may be a phrase, catchy jingle, behavior, or information. It can be passed on and imitated many times. Ultimately the meme is no longer controllable by any one individual. Memetic theory suggests that memes reproduce and evolve in a manner similar to genes. In the trademark context, memetic theory suggests memes are a critical component of a trademark’s popularity and success. Under this view, marketing and advertising strategies may be less important in creating a trademark’s brand awareness than choosing a trademark with strong memes.

This Article, the first to substantively apply memetic theory to trademark law, will unfold in four parts. Part I of this Article introduces memetic theory and provides a definitional framework for the term “meme.” It also outlines some of the basic principles of memetic theory and several criticisms against it. Part II argues that the words, phrases, and symbols protectable by trademark law can fall within the definition of the word “meme.” Part III outlines the ways in which trademark enforcement mechanisms impact memes and can threaten a meme’s evolutionary ability. Part IV provides a pragmatic approach to USPTO trademark applications for society-driven words and catchphrases, suggesting that USPTO trademark examiners assess meme mark applications more stringently. The Article concludes by suggesting that memetic theory is a useful lens through which to view trademark


26 See Beebe, supra note 24, at 757, 757 nn.35 & 36.
29 See BLACKMORE, supra note 28, at 4.
30 Id.
31 Id.
32 Id. (stating that the meme begins to “take on a life of its own”).
33 Jim Chen, There’s No Such Thing as Biopiracy . . . and It’s a Good Thing Too, 37 McGeorge L. Rev. 1, 18–20 (2006); Cotter, Prolegomenon, supra note 25, at 780.
34 See infra Part II.
law, providing a different perspective and calling for a reassessment of current legal standards. The conclusion offers additional insight into how the relationship between memetic theory and trademark law can be further explored.

I. MEMETIC THEORY PRIMER

Memetics is best viewed as a derivative of Charles Darwin’s idea of evolution. Memetics posits that evolution happens primarily on a genetic—not on an individual—level. Since 1976, when Oxford biologist Richard Dawkins used genetic evolution as a segue for creating the meme neologism in his book *The Selfish Gene*, biologists, psychologists, philosophers, and scientists have used it to flesh out the implications of new models of consciousness and thought. Discussion of memetic theory therefore requires consideration not only of memes, but also of Darwinian theories of evolution and natural selection.

A. Evolution, Natural Selection and the Selfish Gene

Darwin outlined the basic theory of evolution in 1859 in *On the Origin of Species by Means of Natural Selection*. Before his book, many scientists had studied the relationships between organisms and contemplated evolution as a general idea, but no one had decidedly figured out how the process worked as a pragmatic matter. Darwin articulated that if living animals differ, and if, due to regular reproduction, there is a struggle for survival, there is likely some beneficial variation in the surviving creatures’ inherent biological makeup. The creatures with these beneficial variations would necessarily have the best probability of survival and create children with the same characteristics. This was the principle Darwin called natural selection—forces of nature must have been driving the selection, not individual creatures.

Darwin’s natural selection principle mandates “variation, selection, and retention (or heredity).” Variation must occur so that not all beings are alike. Regarding selection, some creatures must survive more successfully in a particular environment than others. Finally, retention requires a method where parents pass characteristics on to their children. If each of these features exist, “then any

35 See Cotter, Prolegomenon, supra note 25, at 781.
36 DAWKINS, SELFISH GENE, supra note 28.
37 See BRODIE, supra note 27, at 5–11.
38 CHARLES DARWIN, ON THE ORIGIN OF SPECIES BY MEANS OF NATURAL SELECTION (1859).
39BLACKMORE, supra note 28, at 10.
40 Id.
41 Id.
42 See id.; see also BRODIE, supra note 27, at 49.
43 See BLACKMORE, supra note 28, at 10–11.
44 See BLACKMORE, supra note 28, at 10.
45 Id.
46 See id. at 10–11.
characteristics that are positively useful for survival in that environment must tend
to increase."\(^{47}\)

Even while naturalists at the time adopted Darwinian evolution, problems in
their analytical model became apparent. Naturalists casually discussed evolution as
transpiring for the greater good of the species or group, with little or no
contemplation about the precise mechanisms driving the phenomenon.\(^ {48} \)

One problem was that of exploitation. If, for example, a group of creatures all
act in the best interest of the collective, then one enterprising creature can
effortlessly take advantage of its remaining group mates.\(^ {49} \) It could then create
offspring who also exploit the others, which would destroy the former evolutionary
benefit.\(^ {50} \) The inverse corollary was also problematic; this difficulty concerned the
levels of benevolence in humans and other creatures, which could reduce an
individual’s personal likelihood of survival.\(^ {51} \) A “good of the species” theory could not
explain these behaviors.

Richard Dawkins addressed these issues in *The Selfish Gene*, in which he
popularized the modern view that, though “evolution may appear to proceed in the
interests of the individual, or for the good of the species, . . . in fact it is all driven by
[genetic competition].”\(^ {52} \) In other words, natural selection chooses which genes, and
not which creatures, survive or die.\(^ {53} \) This view is called “selfish-gene theory.”\(^ {54} \) The
term selfish, as used by Dawkins, means that genes exist only to replicate and be
transferred to offspring.\(^ {55} \)

\(^{47}\) Id. at 11.

\(^{48}\) See generally GEORGE C. WILLIAMS, ADAPTATION AND NATURAL SELECTION (1966);
BLACKMORE, supra note 28, at 4.

\(^{49}\) See BLACKMORE, supra note 28, at 4.

\(^{50}\) As one scholar has asked:

On what basis would natural selection lead an organism to sacrifice its own life
for its kin, or to evolve social skills such as trust and cooperation? To be sure,
these traits may improve the group’s probability of surviving and reproducing;
and for a long time, many biologists assumed that natural selection could occur at
the group level and thereby generate selfless behavior on the part of individuals.
But for group selection theories to work, they must overcome a difficult problem:
often, individuals increase their own probability of survival not by acting for the
greater good, but rather by pursuing their own self-interest. An organism that
does not sacrifice itself for a comrade lives to see another day—and will benefit if,
in times of need, it can take a free ride on another comrade’s altruism. Natural
selection, therefore, might seem to suggest that selfish traits will win out over
altruistic traits in the long run, even if altruism would benefit the group to which
the organism belongs.

\(^{51}\) See id. at 335–37.

\(^{52}\) BLACKMORE, supra note 28, at 4–5.

\(^{53}\) See Simon, supra note 25, at 287; BRODIE, supra note 27, at 52 (“The pieces of DNA that are
best at causing themselves to get replicated become most numerous, and it is they that participate in
‘survival of the fittest,’ not whole individuals.”).

\(^{54}\) BRODIE, supra note 27, at 51.

\(^{55}\) See id. at 52.
In the last chapter of *The Selfish Gene*, Dawkins pondered whether other “new replicators” exist that behave like genes. In refining Darwin’s natural selection principle, Dawkins posited that any entity that can make copies of itself will evolve by natural selection if three conditions are met in appropriate amounts: “longevity, fecundity, and copying-fidelity.” More recently, many scholars have interpreted Dawkins’ requirements as encompassing replication, variation, and selection. First, replication means that “the entity must reproduce with sufficient fidelity, fecundity, and longevity to pass on copies of itself to ‘offspring.’” Second, variation requires that the entity sometimes replicate imperfectly, most often through mutation. This may occur either by accident or through deliberate modification. For example, an accidental variation may occur when a person hears a memorable jingle but forgets some of the words or corresponding music when humming it later. On the other hand, a conscious adaptation occurs in the trademark context when a bungee-jumping business is named “Fallmart” after the American retailer Walmart. Third, selection recognizes that the replicator is competing for residential space in its host’s brain. Some replicators are noticed by a person, remembered, and subsequently passed on to others, while others do not get noticed or imitated by anyone.

According to Dawkins, if an entity meets all three requirements, it should also be considered a selfish replicator capable of evolution by natural selection. He further stated that,

> [w]e need a name for [this] new replicator, a noun that conveys the idea of a unit of cultural transmission, or a unit of imitation. ‘Mimeme’ comes from a suitable Greek root, but I want a monosyllable that sounds a bit like ‘gene.’ I hope my classicist friends will forgive me if I abbreviate mimeme to *meme*.

Though Dawkins did not commit himself to a specific definitional framework for the term “meme,” he provided as examples: “tunes, ideas, catch-phrases, clothes

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56 DAWKINS, SELFISH GENE, supra note 28, at 189–201.
57 Id. at 194.
59 Cotter, Memes, supra note 25, at 337. Notably, memes can be shared with others vertically (generation to generation) or horizontally (person to person). Simon, supra note 25, at 288. Because memes need not be passed from parent to offspring, this feature in particular has been the subject of much criticism. Id. at 360–61; see also infra Part I.A.
61 Simon, supra note 25, at 288.
62 See id.
63 See Cotter, Memes, supra note 25, at 337.
64 See BLACKMORE, supra note 28, at 14.
65 DAWKINS, SELFISH GENE, supra note 28, at 200. In this sense, the only purpose of a meme, like the purpose of a gene, is to replicate itself. See Simon, supra note 25, at 288 (“[H]uman bodies are merely . . . ‘vehicles’ that memes use to propagate themselves.”) (footnotes omitted).
66 DAWKINS, SELFISH GENE, supra note 28, at 192 (alterations in original).
fashions, [or] ways of making pots or of building arches.” 67 Without more, the meme concept was the subject of much probing and criticism. The overarching question asked, what exactly are scientists to count as falling under the meme umbrella, and how do we find these memes? 68 Several definitions were posited, and the next Section outlines the competing definitions proposed by meme theorists.

B. Defining the Meme

There are diverse schools of thought on how to define the meme. These schools essentially fall into broad categories focusing on biological, psychological, or cognitive processes. 69

According to the biological definition, the “meme is [a] basic unit of cultural transmission, or imitation.” 70 This definition is along the lines of Dawkins’ original proposition and seemingly endorsed by him in later work. 71 Under this definition, “everything we call ‘culture’ is composed of atomlike memes, which compete with one another.” 72 These memes are transferred from brain to brain. 73 The winning memes—those that infiltrate the most minds and go “viral”—are the ones responsible for creating human culture (i.e., YouTube videos, songs, catch-phrases, etc.). 74 The biological definition is gratifying because it provides a way to reduce all culture into tangible components that manifest as human behavior, but it does not explain why replication happens for some, but not all, memes. 75 As such, it is useful to consider other definitions.

The psychological definition, alternatively, explains more than biological, atom-like entities and their behavioral influence. 76 Using a psychological approach, the “meme is the unit of cultural heredity analogous to the gene . . . [and] the internal

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67 Id. Dawkins mentions that scientific ideas, religions, and fashions may fall within the memetic framework. Id. at 192–93.
68 See BLACKMORE, supra note 28, at 63; Luis Benítez-Bribiesca, Memetics: A Dangerous Idea, 26 INTERCIENCIA 1, 30 (2001).
69 See Cotter, Memes, supra note 25, at 340–43 (discussing various definitional theories and critiques); Simon, supra note 25, at 354–68 (describing various objections to memetics).
71 See DAWKINS, EXTENDED PHENOTYPE, supra note 70, at 109–11 (“If the brain stores information as a pattern of synaptic connections, a meme should in principle be visible under a microscope as a definite pattern of synaptic structure.”); Cotter, Memes, supra note 25, at 340.
72 See BRODIE, supra note 27, at 5.
73 Id. Many biologists share this view. Juan Delius, for example, has said that memes are “constellations of activated and non-activated synapses within neural memory networks,” and “arrays of modified synapses.” Juan D. Delius, Of Mind Memes and Brain Bugs: A Natural History of Culture, in NATURE OF CULTURE: PROCEEDINGS OF THE INTERNATIONAL AND INTERDISCIPLINARY SYMPOSIUM, OCTOBER 7–11, 45, 53 (Walter A. Koch ed., 1989). Others have theorized that memes are patterns of information that invade the human mind and are replicated by others. See, e.g., Glenn Grant, Memetic Lexicon, PRINCIPIA CYBERNETICA WEB (last visited Aug. 31, 2013) http://pescpm1.vub.ac.be/MEMLEX.html.
74 See BRODIE, supra note 27, at 5–6.
75 Id. at 6.
76 Id.
representation of knowledge” residing in the mind.\textsuperscript{77} This definition focuses on the similarity between memes and genes.\textsuperscript{78} It notes that, just as genes create various physical effects (i.e., hair texture, gender or height), the memes residing in the brain can impact human conduct.\textsuperscript{79} This approach, according to some, equates the human brain to a computer: if “memes are the software part of your programming[,] the brain and central nervous system, produced by . . . genes, are the hardware part.”\textsuperscript{80} This way of looking at memes is helpful because it explains how human beings operate, but it is also incomplete because it centers solely on the brain without considering environmental effects.\textsuperscript{81}

Conversely, the cognitive definition completely removes the human brain, and the human itself, from the analysis. This definition, proffered by scientist and philosopher Daniel Dennett, provides that the meme is a type of “complex idea that forms itself into a distinct memorable unit,”\textsuperscript{82} the smallest of which “replicate themselves with reliability and fecundity.”\textsuperscript{83} Using this approach, memes spread,\textsuperscript{84} “propagat[ing] themselves from brain to brain, from brain to book, from book to brain, from brain to computer, [or] from computer to computer.”\textsuperscript{85} As explained by Dennett’s analogy, “[a] wagon with spoked wheels carries not only grain or freight from place to place; it carries the brilliant idea of a wagon with spoked wheels from mind to mind.”\textsuperscript{86} Memes under this approach, therefore, are “substrate neutral, capable of existing in, and spreading” among brains, behavior, and objects.\textsuperscript{87} For example, say the first person whose brain transported the “spoked wheel meme” builds one spoke-wheeled wagon.\textsuperscript{88} Others will see this first wagon, replicate the same meme, and continue to build more wagons until there exist hundreds, thousands, or millions of wagons with spoked wheels.\textsuperscript{89} The cognitive definition, therefore, views memes as operating systems of the brain that produce tangible results “in the physical world that then carry their own seeds to other[s].”\textsuperscript{90}

All of the aforementioned definitions offer desirable qualities. The biological definition provides a fundamental explanation of memes using a familiar sperm-and-egg type framework,\textsuperscript{91} the psychological definition provides a lens into the inner-
workings of the human brain, and the cognitive definition tracks how memes replicate as they travel from substrate to substrate. The cognitive definition, the broadest approach to memes, provides the simplest manner in which to think about them. Because memetic theory is still in its early stages, a broad definitional structure provides the most leeway for later terminology and exceptions as they become identified. Consequently, this article uses the word meme as other scholars have: “indiscriminately to refer to memetic information in any of its many forms; including ideas, the brain structures that instantiate those ideas, the behaviours these brain structures produce, and their versions in books, recipes, maps and written music.”

C. Basic Memetic Theory Principles

At bottom, memetics is a scientific methodology in which memes are distinct units competing for space in our brains, behaviors, and cultural artifacts and fighting for replicatory advantages. In memetic terms, all culture is created by replication. The memes that succeed through widespread imitation have best evolved for replication and communication. When that meme releases subsequent replicators, it begins "to 'have a life of [its] own.'" As noted by memetics scholar Richard Brodie:

Some memes spread directly from mind to mind. Yelling “Fire!” in a crowded theater does a great job of spreading that meme from mind to mind quickly. Some spread more indirectly. A mother, not wanting to perpetuate the unhappy experience she had when her mother raised her with iron discipline, may react by raising her daughter with a very loose rein—a meme from the opposite child-rearing strategy. The granddaughter, in turn, may react to her unhappy experience of the loose rein by resuming Grandmother’s iron hand. The iron hand meme got transmitted indirectly.

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92 Id. at 6.
93 See BLACKMORE, supra note 28, at 66.
95 BLACKMORE, supra note 28, at 66 (noting that “[a]s long as that information can be copied by a process we may broadly call ‘imitation’, then it counts as a meme”).
96 See Simon, supra note 25, at 283.
97 BLACKMORE, supra note 28, at 29 (“The emotions, the intellectual struggles, the subjective experiences—these are all parts of the complex system that leads to some behaviours being imitated and others not.”).
98 See Fried, supra note 25, at 298.
99 BLACKMORE, supra note 28, at 29.
100 See BRODIE, supra note 27, at 15.
Memes, therefore, can spread relatively easily, or they can spread chaotically through a series of cause and effect events. To be successful, however, memes must replicate—this is ultimately their only function.

What causes one meme to replicate more successfully than another? Some theorize that memes cultivate characteristics called “Good Tricks” to provide some memes with advantages over other memes competing for limited space, including: (1) being “genuinely useful to a human host”; (2) being “easily imitated by human brains”; (3) “changing the selective environment to the detriment of competing memes”; or (4) “answer[ing] questions that the human brain finds of interest.”

Not every thing or idea, however, is a meme. Some ideas exist in the mind as basic human thoughts, but these ideas do not travel or escape because they do not include means for escape or copying. Most meme theorists would probably not refer to these thoughts as memes, as it is fundamentally impossible for them to replicate or subsequently be transferred.

Information and ideas that are memes will succeed as long as they replicate well, whether or not they are good ideas, precise, politically correct, or helpful to the host. Memes that make factual claims are not factual, accurate, or true just because they successfully spread to others. In addition, “the success of musical or artistic memes will not necessarily be proportional to their aesthetic merit, and the fecundity of memes for behaviors does not necessarily correlate with their benefit for the people so behaving, or for society at large.” Common examples of successful, yet harmful, memes include Nazism, suicide bombing, airline hijacking, and computer viruses. These replicators get copied as long as they have the equipment needed for copying. Logically, however, if a meme is so harmful that an individual can no longer share it with others, it should be “eliminated from the meme-pool.” Nonetheless, meme success will not inevitably correlate with benefits to the holder.

It is also important to note that memes are not always isolated, individual entities; groups of memes can join and replicate together. Dawkins referred to

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101 Id.
102 See, e.g., Simon, supra note 25, at 289 (“[M]emes are just replicators . . . . They do this in the same way genes use human beings . . . to replicate themselves. Genes do not ‘want’ anything other than to make more copies of themselves.”).
103 Cotter, Memes, supra note 25, at 338–39, 345 (footnotes omitted).
104 Stake, supra note 25, at 1225.
105 Id. at 1225 n.30 (citing STEVEN PINKER, THE LANGUAGE INSTINCT: HOW THE MIND CREATES LANGUAGE 55–82 (1994)) (discussing ideas trapped in the mind, incapable of translation into a intelligible form of expression).
106 Id. at 1225.
107 Fried, supra note 25, at 298; see also Stake, supra note 25, at 1239–40.
108 Fried, supra note 25, at 298.
109 Id. at 298–99.
110 See BRODIE, supra note 27, at 15, 36; Dennett, supra note 28, at 363.
111 See BLACKMORE, supra note 28, at 13.
112 DAWKINS, EXTENDED PHENOTYPE, supra note 70, at 110.
113 See Simon, supra note 25, at 292 (“The meme of suicide bombing is clearly bad for the host, who dies. But the meme does not die along with the host. To the contrary, others may celebrate (or condemn) the meme, which will be further perpetuated and probably endorsed by other hosts.”).
114 See BLACKMORE, supra note 28, at 19; Simon, supra note 25, at 290.
these as “coadapted meme complexes,” but the phrase is often shortened as “memeplexes.”115 Within these groups, some memes may be stronger and more successful at replication than others, and the memeplex may be selected because of some memes, but not others.116 The quintessential example offered by meme theorists is that of the computer virus.117 Computer viruses can replicate from one machine to another very quickly, but they cannot stand alone as empty “copy me” messages—they may ruin the first computer, but they have no way to get out of the infected machine without attaching to something else.118 Oftentimes, these viruses are attached to other memes to insure their replication, for example, through an email from a recognized sender or by hiding in the code of an often-visited website.119 Another example is the chain letter, which operates with a two-pronged memeplex: a promised-threat meme for noncompliance and a promised-reward meme for compliance.120 The chain letter memeplex forces replication by declaring that a person’s well-being depends on her forwarding or sharing it with others.121

D. Criticisms of Memetic Theory

Memetic theory has, predictably, been the subject of significant criticism from the scientific community.122 In addition to the aforementioned definitional approaches, there has been much disagreement regarding mutation instability, the characterization of memetics as Darwinian as opposed to Lamarckian,123 and the relative size and scope of the meme.124 This section outlines these criticisms and responses from meme theorists.

115 BLACKMORE, supra note 28, at 19 (comparing meme groups to gene groups and noting that “a free-floating piece of DNA could not effectively get itself replicated” without groups of genes).
116 Simon, supra note 25, at 290 (citing Derek Gatherer, Macromemetics: Toward a Framework for the Re-unification of Philosophy, 1 J. MEMETICS 1, § 3 (1997), available at http://cfpm.org/jom-emit/1997/vol1/gatherer_dg.html (comparing memeplexes to “pork barrel” legislation, in which smaller legislation “is attached . . . to large, complex bills to avoid being selected against”)).
117 See BLACKMORE, supra note 28, at 20.
118 See id.; BRODIE, supra note 27, at 42.
119 See, e.g., Frank Thorsberg, The World’s Worst Viruses, PCWORLD (Aug. 23, 2002, 1:00 AM), www.pcworld.com/article/103992/article.html (naming “LoveLetter,” a virus that impacted millions of Widows PCs, as the worst computer virus to date). Customers were “infected via e-mail, through Internet chat systems, and through other shared file systems.” Id. Once the virus accessed a computer’s email program, it sent out copies of itself to all contacts listed in the address book. Id. The infectious messages the mysterious subject line, “ILOVEYOU.” Id.
121 Fried, supra note 25, at 300.
122 See, e.g., Benitez-Bribiesca, supra note 68, at 31. Dr. Benitez-Bribiesca, for example, has called memetics “pseudoscientific dogma encased in itself” and “something akin to psychoanalysis with its wonderful intellectual construction but devoid of any objective proof.” Id.
124 See infra notes 138–147 and accompanying text.
One of the most common criticisms to memetics is that memes are not stable enough to be likened to genes. Some argue that memes lack a “code script” similar to the function that DNA performs for genes, which arguably leads to imprecise copying and high mutation rates. According to some critics, memes cannot possibly replicate themselves with the degree of accuracy of genetic evolution. Without a structural counterpart similar to DNA, critics argue that effective variation cannot occur because the meme lacks a “precise copying mechanism.” Many scholars liken this to the childhood game “Telephone,” where one person whispers a sentence, or series of sentences, in the ear of another, who then whispers it in the ear of another, until all participants have received the whispered message in a sequential manner. In nearly every case, the final sentence bears little to no resemblance to the original. This is problematic because, as earlier noted, natural selection can only occur in memes if they reproduce with sufficient fidelity to pass on copies of themselves to offspring.

Memeticists have responded to this criticism by arguing that information is often transmitted with enough accuracy for there to exist “some degree of natural selection.” In addition, some scholars have distinguished grammatical form from linguistic properties:

[o]ne of the most striking features of cultural evolution is the ease, reliability, and confidence with which we can identify commonalities in spite of the vast differences in underlying media. What do Romeo and Juliet and . . . West Side Story have in common? Not a string of English characters, not even a sequence of propositions (in English or French or German . . . translation). What is in common, of course, is not a syntactic property or system of properties but a semantic property or system of properties: the story, not the text; the characters and their personalities, not their names and speeches. What we so readily identify as the same thing in both cases is the predicament that both William Shakespeare and Arthur Laurents (who wrote the book for West Side Story) want us to think about. So it is only at the level of intentional objects, once we have adopted the intentional stance, that we can describe these common properties. When we do adopt the stance, the sought-for common features often stick out like sore thumbs.

125 See, e.g., Benítez-Bribiesca, supra note 68, at 30.
126 See id. at 30–31; Robert Aunger, Conclusion, in DARWINIZING CULTURE, supra note 28, at 228–29 (further exploring distinction between genetic and “cultural” evolution).
127 Benítez-Bribiesca, supra note 68, at 30 (citation omitted) (“Information in genes is encoded in digital form with four letters, but in memes messages are encoded in continuously varying analoguous symbols that might rapidly decay into noise as they are transmitted from individual to individual.”).
128 Cotter, Memes, supra note 25, at 342 (footnotes omitted).
129 See supra note 60 and accompanying text.
130 Cotter, Memes, supra note 25, at 343 (emphasis added).
131 DENNETT, supra note 28, at 356 (emphasis omitted) (citations omitted).
Another response, based on the biological definition of memes, theorizes that memes are physical entities, like genes, that have not yet had the seminal “Watson and Crick” discovery that genes had in 1953.132

A second criticism is that memetics is based on the now-discredited Lamarckian theory of evolution and not Darwinism. Jean-Baptiste Lamarck hypothesized that animals not only inherit characteristics through the egg and sperm, but that they can inherit traits that their parents developed in life.133 So, for example, Lamarck believed that an assiduous basketball player who diligently practiced dribbling a basketball could pass down his dribbling skills to his offspring. Darwin’s departure from this philosophy is what saved evolution from scientific disrepute—“acquired traits cannot be inherited” as Lamarck; only those characteristics possessed at birth can be inherited by offspring.134 Several scholars have noted that the differences between genes and memes become most clear with respect to claims of Lamarckianism.135 When a gene is passed to a child, it is generally accomplished by sexual reproduction through the parents; an occasion will not arise for the gene to be subsequently passed to another person.136 Memes, however, reproduce by imitation, not via sperm and egg, and there are no scientific reasons that replication differences preclude Darwinian-type evolution.137

One final criticism exists because there is no clear consensus on the requisite size of the meme.138 In her seminal text, prominent memetic scientist Susan Blackmore conceded that the meme’s size and structure may be impossible to identify, she but further noted that the genetic unit is similarly unclear among scientists.139 Dawkins similarly explained that:

[t]o define a gene as a single cistron is good for some purposes, but for the purposes of evolutionary theory it needs to be enlarged. . . . We want to find the practical unit of natural selection. To do this we begin by identifying the properties that a successful unit of natural selection must have. . . . [T]hese are longevity, fecundity, and copying-fidelity. We then

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133 See Simon, supra note 25, at 360 (citing Packard, supra note 123, at 357–71).

134 Id. at 361.

135 See id.; BLACKMORE, supra note 28, at 59–62.

136 Simon, supra note 25, at 361.

137 Id.

138 See Benitez-Bribiesca, supra note 68, at 30; Cotter, Memes, supra note 25, at 350; Simon, supra note 25, at 354–55.

139 BLACKMORE, supra note 28, at 53–56. Blackmore further observed that the appropriate measurement of a gene changes with “relevant selection pressures” and differs between scientists interested in different things. Id. at 54; see also DAWKINS, SELFISH GENE, supra note 28, at 195 (noting that the gene is “defined, not in a rigid all-or-none way, but as a unit of convenience, a length of chromosome with just sufficient copying-fidelity to serve as a viable unit of natural selection”).
simply define a 'gene' as the largest entity which, at least potentially, has these properties.140

In asking “how long is 'long enough'?” with respect to meme size, Dawkins noted that the answer will vary from example to example.141 Similar inherent fluidities, however, about what should be considered a gene have not hindered scientific advancement in the relevant fields.142 The best approach, therefore, is to apply the same logic to memetics and apply a fluid, but pragmatic, sizing structure to the meme.

Some scholars have attempted to do this very thing. Dennett, for example, has defined units of memes as “the smallest elements that replicate themselves with reliability and fecundity.”143 Dawkins has explained that a “single phrase of Beethoven’s ninth symphony” is the equivalent of one meme.144 Blackmore has further suggested that:

[a] blob of pink paint is too small a unit for memetic selection pressures to apply—to be enjoyed or disliked, photographed or thrown away. A whole gallery of paintings is too large. The single painting is the natural unit for most of us and that is why we remember Van Gogh’s Sunflowers or buy postcards of Edvard Munch’s The Scream. Styles of paintings, such as impressionism or cubism, can also be copied and therefore count as memes, but can hardly be divided up into units.145

Finally, several scholars have proposed that a single word can function as a meme.146 Meme size and scope, therefore, is not a “rigid all-or-none way,” but “a unit of convenience . . . with just sufficient copying-fidelity to serve as a viable unit of natural selection.”147 It is therefore wrong to suggest that memetics cannot or should not exist because of variations in meme size or structure.

Assuming that memes do actually exist, and that memetics remains acceptable scientific theory, how can memetics inform an analysis of trademark law, and what is the benefit in doing so? Memetic theory may offer some explanation for why certain trademarks are copied more than others.148 Likewise, memetics has the capacity to describe what causes human beings to replicate and transmit some trademarks but

140 DAWKINS, SELFISH GENE, supra note 28, at 35.
141 Id. at 36.
142 See BLACKMORE, supra note 28, at 54; Hull, supra note 94 at 46–47 (noting that even geneticists have not used the word “gene” consistently); Helen Pearson, Genetics: What Is a Gene?, 441 NATURE 398, 398 (May 25, 2006) (noting that scientists are “less . . . sure about what, if anything, a gene actually is”).
143 DENNETT, supra note 28, at 344.
144 DAWKINS, SELFISH GENE, supra note 28, at 195. Indeed, the distinctive “ta-ta-ta-TUM” from Beethoven’s Fifth Symphony, is an oft-used example of a meme. BRODIE, supra note 27, at 12; see also BLACKMORE, supra note 28, at 53.
145 BLACKMORE, supra note 28, at 54.
146 Cotter, Memes, supra note 25, at 351.
147 DAWKINS, SELFISH GENE, supra note 28, at 195.
148 See Cotter, Prolegomenon, supra note 25, at 782–83 (offering a memetic explanation for the spread of religious doctrines).
not others. If a trademark can be a meme on its own, or attach to a popular memeplex, memetics could significantly impact the adoption and success of trademarks and the way in which companies build and implement their brands. Trademarks are the critical way in which companies communicate with the buying public. Their power to generate brand loyalty makes them important in the competition for consumer attention and ultimately consumer dollars. In addition, if strong memes, and not the putative trademark owner’s own efforts, have propagated the strength and distinctiveness of a trademark, the USPTO should consider this when assessing trademark applications. As argued below, because memetic theory gives those who understand it the opportunity to better influence the spread of memes, it can provide a useful way for thinking about how trademarks exist and thrive in the commercial marketplace. It can also provide a basis for preventing the immediate privatization of certain culturally driven marks and catchphrases.

II. THE INTERSECTION OF TRADEMARK LAW AND MEMETIC THEORY

Given that the term “meme” may refer to memetic information in an all-encompassing manner, it is conceivable that trademarks could fall within the term’s scope. Dawkins initially identified tunes and catchphrases as two examples of memes, and other scholars have suggested that single words can be memes. The Lanham Act defines trademarks as designations including “any word, name, symbol, or device, or any combination thereof.” There is, thus, overlap between the basic definitions of memes and trademarks.

Proceeding on this basis, this Part outlines some of the myriad issues that arise in viewing trademarks through the lens of memetic theory. In considering whether a trademark is also a meme, three conditions must exist. First, the trademark must exist in a form recognizable as coming under the meme umbrella. Second, the trademark must be a selfish replicator. Finally, even if a trademarked designation meets the functional memetic requirements, trademark enforcement mechanisms may stifle, or even eliminate, replication in such a way that true natural selection is not possible.

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149 See BLACKMORE, supra note 28, at 14.
150 See Long, supra note 21, at 133–34.
151 See id. at 133–35.
152 See infra Part II.B.
153 BLACKMORE, supra note 28, at 66. The term meme “include[es] ideas, the brain structures that instantiate those ideas, the behaviours these brain structures produce, and their versions in books, recipes, maps and written music,” as long as that information can be imitated. Id.
154 DAWKINS, SELFISH GENE, supra note 28, at 192.
155 See, e.g., Cotter, Memes, supra note 25, at 350.
A. Trademarks in an Acceptable Memetic Form

The term trademark has multiple meanings—it can describe an entire range of “trademarks, service marks, trade names, certification and collective marks, and trade dress,” or it can refer only to words and symbols used to identify products.157 In the interest of efficiency, this Article focuses on designations like words, names, symbols and devices, and their function in (1) identifying and distinguishing goods from those manufactured or sold by others and (2) indicating the source of the goods.158 These designations are protectable by trademark law when they are adopted, used in trade, and distinctive, either inherently or through the acquisition of secondary meaning.159 Since the nineteenth century, the Supreme Court has recognized as a general proposition that “the exclusive right to the use of the mark or device claimed as a trade-mark is founded on priority of appropriation; . . . the claimant of the trade-mark must have been the first to use or employ the same on like articles of production.”160 Generally, therefore, only actual use as a trademark, and not USPTO registration, creates rights in such designations. The only exception is that since 1989, a party can file a trademark application based on that party’s intent to use the mark in commerce, even if that party has not yet used the mark on anything.161

With respect to distinctiveness, the general rule is that a designation is protectable as a trademark if it falls into one of two categories. First, some trademarks are so inherently distinct that legal protection is granted “immediately upon adoption and use in trade.”162 This category of trademarks includes fanciful, arbitrary, and suggestive marks.163 A fanciful mark is a word that is created for the purpose of operating as a source indicator and can include terms unfamiliar to consumers.164 An arbitrary mark, on the other hand, consists of a designation that is part of the public lexicon but applied to the goods in a manner unrelated to its traditional meaning.165 Marks are suggestive “if [they require] imagination, thought and perception to reach a conclusion as to the nature of goods.”166

161 MCCARTHY, supra note 157, § 16:4.
162 Id.; Two Pesos, 505 U.S. at 768–69.
164 MCCARTHY, supra note 157, § 11:4; Fleischmann Distilling Corp. v. Maier Brewing Co., 314 F.2d 149, 153–54 (9th Cir. 1963) (finding BLACK & WHITE for scotch whiskey arbitrary); Hanover
Descriptive marks are neither inherently distinctive nor automatically protectable. These marks are only protectable as trademarks if they have acquired secondary meaning.\(^{167}\) Though nearly every jurisdiction interprets secondary meaning differently, the crux of the doctrine “is a mental association in buyers’ minds between the alleged mark and a single source of the product.”\(^{168}\)

In all of this, it is worth noting that the term “trademark” has been interpreted quite broadly. Under an increasingly expansive approach to trademark law, a trademark can include not only a word mark such as KODAK or McDONALD’S, but also things like the Coca-Cola bottle design,\(^{169}\) the vertical opening motion of Lamborghini’s car doors,\(^{170}\) Christian Louboutin’s contrasting red outsole on women’s shoes,\(^{171}\) or the Metro-Goldwyn-Mayer (“MGM”) lion’s roar.\(^{172}\)

Using the earlier-adopted cognitive approach, which provides that a meme is the smallest unit of culture that can be reliably copied, a trademark designation can also be a meme. Size (including length), “independent memorizable meaning,” and cultural beliefs of the audience are significant factors in determining whether trademarks fall within the cognitive definition of a meme.\(^{173}\) Thus, even a short musical sequence can be a meme if it is culturally significant to the listener.\(^{174}\) Indeed, if one hears “\textit{twinkle, twinkle, little star},” that person may continue humming “\textit{how I wonder what you are}” because of an independent, memorizable meaning from childhood.\(^{175}\)

\begin{itemize}
  \item Star Milling Co. v. Allen & Wheeler Co., 208 F. 513, 517 (7th Cir. 1913), \textit{aff’d}, 240 U.S. 403 (1916) (discussing arbitrary marks).
  \item \textit{See} \textsc{Two Pesos, Inc. v. Taco Cabana, Inc.,} 505 U.S. 763, 769 (1992). The Lanham Act uses the phrase “acquired distinctiveness,” while the term “secondary meaning” was created by the common law. \textsc{McCarthy, supra note 157, at § 15:1} (footnotes omitted).
  \item \textsc{McCarthy, supra note 157, § 15:5} (outlining some of the varied approaches to secondary meaning).
  \item U.S. Trademark No. 2,085,197 (filed Dec. 15, 1994) (Coca-Cola Bottle Shape).
  \item \textit{See}, \textit{e.g.}, \textsc{J.M. Balkin, Cultural Software: A Theory of Ideology} 47 (1998).
  \item \textit{Id.} On the other hand, some scholars have been hesitant to include such small elements in the definition of memes. \textit{See}, \textit{e.g.}, \textsc{Dennett, supra note 28, at 344}. In the intellectual property arena, arguments against including individual words and short phrases in the definition of a meme have been made in relation to copyright law. According to Professor Cotter, this has largely been because a definition that is “too particulate will have no implications for copyright law, because . . . copyright does not subsist in individual words or letters or short phrases.” \textit{See} Cotter, \textsc{Memes, supra note 25, at 350}. Even so, Cotter noted that he was “not sure if there is any reason to exclude such tiny elements from the definition of the meme.” \textit{Id.} at 350.
  \item \textit{See} \textsc{Balkin, supra note 173, at 47}; \textsc{Blackmore, supra note 28, at 7} (discussing the song \textit{Happy Birthday to You}).
\end{itemize}
The ultimate function of a trademark is to cause a consumer to mentally associate a particular product with that mark.\(^\text{176}\) This legal premise largely comports with the aforementioned meme factors of length, memorability, and cultural expectations, and these factors support the notion that a trademark can also be a meme.

Turning to some of the earlier examples, McDONALD’S is one word made of nine letters and is relatively short as far as memes are considered.\(^\text{177}\) However, through years of use, marketing, advertising, consumer loyalty, and service, it has become a memorable phrase identifying the world’s largest chain of fast-food restaurants. Turning to cultural expectations, it is difficult to deny the impact that the company, using the trademark McDONALD’S, has had on socioeconomics, the free market, and the food industry.\(^\text{178}\) Using a memetic theory analysis, therefore, the trademark McDONALD’S could fall within the definition of meme, although its status as such would depend upon whether it also meets Dawkins’s three conditions of replication, variation, and selection.\(^\text{179}\)

Memetic theory can also apply to non-traditional trademarks other than words and phrases, such as the MGM lion’s roar.\(^\text{180}\) Though it only has a 7.5 second duration, arguments can certainly be made that it is memorable and culturally significant to the listener. The roar was first used in 1924, has appeared consistently in openings and closings of MGM films, and is widely recognized by American movie audiences.\(^\text{181}\) Based on these two examples, even shorter-length trademarks can be considered appropriate for purposes of memetic analysis. The ultimate status as a meme, however, will turn on a trademark’s ability to function as a selfish replicator.

**B. Trademarks as Selfish Replicators**

As identified earlier, Dawkins posited that any entity that can make copies of itself will evolve by natural selection if replication, variation, and selection

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\(^\text{176}\) See MCCARTHY, supra note 157 § 3:6.

\(^\text{177}\) But see Cotter, Memes, supra note 25, at 350 (stating that “there is a good pragmatic reason not to define single words, letters, or notes of the musical scale as memes”).


\(^\text{179}\) See supra Section I.B.

\(^\text{180}\) Case R-781/1999-4, Metro-Goldwyn-Mayer Lion Corp., 2004 E.T.M.R. 34 (CTM No. 143891), ¶ 9 (Aug. 25, 2003). MGM has more particularly described its trademark in the European Trademark Office as “the sound of a roaring lion having a 7.5 second duration (absissa) with a frequency response from 25 Hz to 12.5 Hz with measurable harmonies to 20 Kz (y-axis). It has peak modulation at 0.5 second and 4 seconds from the start of the lion’s roars and attendant growls.” Id. Though MGM first used the mark in 1924, the trademark application was not filed until August 15, 1985, and it ultimately registered on June 3, 1986. See No. ‘550, supra note 172.

appropriately exist. The overarching question, then, is whether a trademark has the capacity to replicate and evolve under this three-part standard.

Replication requires that a trademark have the capacity to create copies of itself with sufficient fecundity, fidelity, and longevity to pass those replicas on to others. Under a cognitive definition, this could take place from one person to another, written materials to consumer, or computer to user. Replication can arise in a number of contexts, including marketing, consumer-to-consumer interactions, and trademark infringement. Returning to the earlier examples, the McDONALD'S trademark (or meme) can be created and copied many times over when one Twitter user tweets about her pleasant experience in the fast food restaurant to her many followers, some of whom retweet the original user's message to their many followers. Similarly with MGM's lion's roar, one recent search on YouTube for “MGM lion roar” returned over 5000 results. Of the videos posted, a number of them included exact reproductions of the lion's roar from past MGM films. Replication also arises when an alleged infringer copies the trademark for similar or different categories of goods. This may be in exact form (i.e., a person naming their restaurant “McDonald’s Hamburgers: Country Drive-Inn”) or as a variation (i.e., a group of dentists naming their dental practice McDENTAL).

Variation, as a separate condition, requires that the trademark occasionally replicate imperfectly, usually by accident or through “conscious adaptation.” This is perhaps the most difficult barrier in defining the relationship between trademarks and memetic theory. The use requirement in trademark law has a physical dimension, and both the USPTO and courts weigh heavily the consistency of such use in determining whether to accord legal protection to a possible trademark. A trademark need not be “particularly large in size or . . . appear in any particular position on the goods, but it must be used in such a manner that its nature and function are readily apparent and recognizable without extended analysis or research and certainly without legal opinion.” In one example, a court denied trademark protection for the term INTELLIGENCE EVERYWHERE because the putative

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183 See supra note 59 and accompanying text.
184 Twitter Glossary, TWITTER.COM, https://support.twitter.com/entries/166337-the-twitter-glossary#r (last visited Aug. 31, 2013) (defining a retweet as a “[t]weet by another user, forwarded to you by someone you follow [and] [o]ften used to spread news or share valuable findings on Twitter”).
186 See id. (including the lion's roar from films released in 1928, 1934, 1982, and 2008).
187 Both of these instances resulted in lawsuits in which McDonald’s successfully forced the businesses to change their names. See Quality Insns Int'l, Inc. v. McDonald's Corp., 695 F. Supp. 198, 201 (D. Md. 1988); McDonald's Corp. v. Druck and Gerner, DDS., P.C., 814 F. Supp. 1127, 1135 (N.D.N.Y. 1993).
188 Simon, supra note 25, at 288.
189 See MicroStrategy Inc. v. Motorola, Inc., 245 F.3d 335, 342 (4th Cir. 2001) (discussing Textron Inc. v. Cardinal Eng'g Corp., 164 U.S.P.Q. 397, 399 (T.T.A.B. 1969)) (holding mark protectable where it had been used in a "constant pattern" and was “always set off” in some way).
190 Id. (citations omitted).
owner's use was too sporadic and lacked a "consistent" pattern of use.\textsuperscript{191} According to the court, the putative owner had not consistently placed INTELLIGENCE EVERYWHERE on "a particular part of the page, or in a particular type, or labeled it with [the superscript] "TM," or consistently used a distinctive font, color, typeset or any other method" that warranted trademark protection.\textsuperscript{192} As such, a designation will typically not be protected under trademark law if it has not been used consistently.\textsuperscript{193}

One exception to this general principle is the "family of marks" rule. The Federal Circuit Court of Appeals defines a family of marks as,

...a group of marks having a recognizable common characteristic, wherein the marks are composed and used in such a way that the public associates not only the individual marks, but the common characteristic of the family, with the trademark owner. Simply using a series of similar marks does not of itself establish the existence of a family. There must be a recognition among the purchasing public that the common characteristic is indicative of a common origin of the goods.\textsuperscript{194}

Under this rule, the McDonald's corporation, for example, has come to own a number of marks, both related and unrelated to food, distinguished by the "Mc" formative, "including McDONUT for doughnuts, McPIZZA for a pizza product, and McMUFFIN, McCHICKEN and McRIB for sandwich-type products."\textsuperscript{195} Returning to the variation prong, the "family of marks" rule is one clear example of conscious adaptation of a trademark.

The MGM lion's roar is less clearly part of a family of marks, but still variable enough to be a meme. Though the lion's roar has been used since 1924, the literal intonations and number of roars have been changed and enhanced over time.\textsuperscript{196} What is more, MGM has used variations of the lion's roar in specific films. For example, in the 1935 film \textit{A Night at the Opera}, it is Groucho Marx, and not a lion, who roars in the opening trailer.\textsuperscript{197} In certain \textit{Tom and Jerry} theatrical features from the 1960s, it is Tom the cat who hisses and meows during the opening.\textsuperscript{198} The

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\textsuperscript{191} \textit{Id.} at 341–44.
\textsuperscript{192} \textit{Id.} at 342.
\textsuperscript{193} This is not to say that trademarks cannot be periodically upgraded or revamped. See Long, supra note 21, at 133. The appearance of a trademark "can be updated to take advantage of popular trends or new imaging methods, generally without a loss of rights." \textit{Id.} (describing how Prudential Insurance Company's Rock of Gibraltar logo, which first appeared in 1896, has gone from a "generally idealized but accurate depiction" to "merely an abstract design of the outline of a rock").
\textsuperscript{194} \textit{J & J Snack Foods Corp. v. McDonald's Corp.}, 932 F.2d 1460, 1462 (Fed. Cir. 1991) (holding that McDonald's possesses a family of marks where the prefix "Mc" is used with generic food names).
\textsuperscript{195} \textit{Id.} at 1461.
\textsuperscript{198} \textit{Id.}
\end{flushright}
lion’s roar, therefore, has also experienced owner-created variations over the years that justify its identification as a meme.

Finally, selection provides that some memes, and/or their mutations, have “a replicatory advantage within a given environment.”\(^{199}\) Certain memes are passed on to other people quickly and go viral, while others do not get copied at all.\(^{200}\) This condition points to the crux of trademark development: to identify and distinguish one company’s goods from competitors in such a way that deepens buyer loyalty and ultimately increases market share.\(^{201}\) Trademark owners use a number of methods to achieve brand loyalty over their competitors, including market testing, advertising, maintaining product quality, ensuring longstanding use, and appealing to consumer characteristics.\(^{202}\) Because trademarks are ultimately a practical way of connecting with individual consumers, scholars have noted that they are “powerful forces” even when unwarranted.\(^{203}\) “[S]trong . . . loyalty results in a measurable price premium that consumers are willing to pay for the brand,” regardless of how similar, or in some instances how much lower, the quality is as compared to competing items.\(^{204}\) McDonald’s, for example, has some of the most popular trademarks and brands around the globe,\(^ {205}\) even though the quality of its food offerings is a subjective determination. This reality certainly provides the trademark Mc\(D\)onald’s with a replicatory advantage.

Using the aforementioned analysis, trademarks can operate as selfish replicators and therefore fit within Dawkins’s original vision of the meme.\(^{206}\) Trademark law appears to be premised on doctrines similar to the natural selection process, at least in some respects. The strongest trademarks are those that have garnered customer loyalty through their association with quality products, the emotional attachments of consumers to the goods, and years of use, marketing and advertising.\(^{207}\) Strong memes, like trademarks, have the highest levels of memorability and infectiousness.\(^{208}\) Those that also have the most interactions between hosts will prevail.\(^{209}\)

\(^{199}\) Cotter, Memes, supra note 25, at 337.

\(^{200}\) See supra note 64 and accompanying text.

\(^{201}\) See Long, supra note 21, at 128–29, 134.

\(^{202}\) Dreyfuss, supra note 18, at 402, 402 n.25, 416; Long supra note 21, at 135 (discussing consumer loyalty).

\(^{203}\) See, Long, supra note 21, at 135.

\(^{204}\) Id.

\(^{205}\) See Quality Inns Int’l, Inc. v. McDonald’s Corp., 695 F. Supp. 198, 203 (D. Md. 1988) (noting that “over 95 percent of the entire American population has eaten at a McDonald’s, and eight percent of the entire work force in the United States once worked at a McDonald’s restaurant” and that “[t]he recognition of Ronald McDonald by children between the ages of two and eight is 100 percent, a figure matched only by Santa Claus”).

\(^{206}\) See supra notes 58–66 and accompanying text; see generally DAWKINS, SELFISH GENE, supra note 28, at 189–201.

\(^{207}\) See generally, Long, supra note 21, at 125–26.

\(^{208}\) See DENNETT, supra note 28, at 344 (referring to memes as “distinct memorable units”) (emphasis omitted).

The comparison between trademarks and memes, however, is incomplete because all three requirements may not be equal. The Dawkins three-pronged analysis requires a balance between replication, variation, and selection in appropriate amounts, otherwise evolution by natural selection is impossible. Whether individual trademarks can strike the appropriate balance is not always clear. The next Part outlines the factors impacting this balance with respect to trademark memes.

III. THE INTERSECTION OF TRADEMARK ENFORCEMENT AND NATURAL SELECTION

Certain facets of the law impact how trademarks evolve through natural selection. Trademark enforcement delivers the main impact, particularly with respect to families of marks and famous trademarks. The most common way trademark owners enforce their trademark rights is through lawsuits for infringement and/or dilution. If enforcement mechanisms create too many biases in meme transmission or too much mutation, then perhaps such a balance cannot be struck. Individuals fearful of a trademark lawsuit may not imitate a trademark that memetic theory otherwise supports.

A. Trademark Infringement and Memes

The basic test for trademark infringement is whether the marks are so similar that consumers are likely to be confused. In this vein, a trademark owner can only enforce its trademark rights against use on a product that would “reasonably be thought by [consumers] to come from the same source, or thought to be affiliated with, connected with, or sponsored by, the trademark owner.” Federal courts have developed a factor-based test that determines likelihood of confusion. The traditional infringement analysis will impact memetic replication only when it “changes the selective environment to the detriment of competing memes, or in

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210 See DAWKINS, SELFISH GENE, supra note 28, at 193–94.
211 See Cotter, Memes, supra note 25, at 353 (discussing question of balance with respect to copyright). Determining this balance may depend upon the “Watson and Crick” moment that has yet to happen.
212 See MCCARTHY, supra note 157, § 23:1. This is true under common law, state law and federal law. Id.
213 Id. § 24:6; see also CAE, Inc. v. Clean Air Eng’g, Inc., 267 F.3d 660, 680 (7th Cir. 2001) (finding infringement possible where purchasing public “could conclude that [the defendant’s] products and services are affiliated or associated with [the trademark owner’s]”).
214 Compare Polaroid Corp. v. Polarad Elecs. Corp., 287 F.2d 492, 495 (2d Cir. 1961), cert. denied, 368 U.S. 820 (1961), with AMF, Inc. v. Sleekcraft Boats, 599 F.2d 341, 348–49 (9th Cir. 1979). The test is not identical in all of the federal circuits, but most of the analyses include some semblance of the following factors: the strength of plaintiff’s mark, the degree of similarity between the infringed mark and the allegedly infringing mark, the proximity of the products in the marketplace, the likelihood that the prior owner will bridge the gap, actual confusion, and the defendant’s good faith in adopting its own mark, the quality of defendant’s product, and the sophistication of the buyers. See, e.g., Polaroid, 287 F.2d at 495.
some way renders competing memes defenseless.”

In most instances, however, infringement does not significantly impact memetic replication. There are three reasons for this. First, in most cases a trademark owner can only preclude another from using the same or a similar trademark on goods. For example, if a trademark owner uses the name TRADEWINDS for its coffee pots, it cannot preclude a software company from using the name TRADEWINDS for its virus protection software. Second, use as a trademark is required in most instances. The earlier-mentioned coffee pot manufacturer, therefore, cannot keep an unrelated coffee company from advertising that “our new individualized, flavored coffee packets work great with TRADEWINDS coffee pots” because the coffee company is not using the term TRADEWINDS as a trademark to identify itself. Third, one commonly used factor in determining a likelihood of confusion is the similarity of the marks. This factor could be seen as encouraging memetic mutations, in the sense that infringement is unlikely to be found where the marks have visible differences. Essentially, therefore, TRADEWINDS on coffee pots is generally only enforceable against others who use TRADEWINDS on coffee pots. This principle leaves the selective environment unchanged. The TRADEWINDS meme for coffee pots still remains, regardless of the source, and TRADEWINDS can still be used for unrelated goods or services.

One exception to this would be the expansion of trademark infringement jurisprudence through the family of marks concept. As noted elsewhere in this Article, McDonald’s has successfully been able to control non-food uses of the prefix “Mc.” In addition, a family of “R” US suffix marks was found to exist in Geoffrey Inc.’s use of marks TOYS “R” US and KIDS “R” US. In this manner, trademark owners can capitalize on the societal prominence of their marks and expand the enforceable reach of these marks. As a result, the justifications that formerly

215 Cotter, supra note 25, at 382.

216 Hanover Star Milling Co. v. Metcalf, 240 U.S. 403, 414 (1916). Explaining this well-established principle of trademark law, the Supreme Court noted that:

[i]f [a person] does not carry on a trade in iron, but carries on a trade in linen, and stamps a lion on his linen, another person may stamp a lion on iron; but when he has appropriated a mark to a particular species of goods, and caused his goods to circulate with this mark upon them, the court has said that no one shall be at liberty to defraud that man by using that mark, and passing off goods of his manufacture as being the goods of the owner of that mark.

Id. (quotation omitted).

217 See, e.g., Graeme B. Dinwoodie & Mark D. Janis, Confusion Over Use: Contextualism in Trademark Law, 92 IOWA L. REV. 1597, 1599, 1636 (2007). Few non-trademark uses will infringe. Id. (“To be sure, trademark uses are more likely to infringe; they still represent the paradigmatic infringement case. Likewise, non-trademark uses are on balance more likely to be justified or non-actionable in any number of ways because they are less likely to implicate the core concerns of trademark law.”).

218 See, e.g., Ty, Inc. v. Jones Grp., Inc., 237 F.3d 891, 899 (7th Cir. 2001) (finding that the “Beanie Babies” and “Beanie Racers” marks were similar and confusingly similar).

219 See supra note 187 and accompanying text.


221 See Dreyfuss, supra note 18, at 398.
limited the scope of trademark infringement by goods identification have lost quite a bit of their original impact.\textsuperscript{222} This expansion modifies the natural selection environment because competing memes on unrelated goods are essentially powerless to compete with a family of marks.\textsuperscript{223}

B. Trademark Dilution and Memes

A related expansion problem is trademark dilution, where a trademark owner may enforce its rights in a trademark that is legally characterized as “famous.”\textsuperscript{224} Federal dilution claims were not created until 1995 and were considerably revised by the Federal Trademark Dilution Revision Act of 2006 ("TDRA").\textsuperscript{225} Dilution grants protection to famous trademarks if a defendant’s use will “diminish or dilute the strong identification value of the plaintiff’s mark” even if there is no likelihood of confusion.\textsuperscript{226} Upon a showing of fame, the trademark owner must next prove dilution by either blurring or tarnishment.\textsuperscript{227} Blurring occurs when consumers see the plaintiff’s famous mark on various other goods and “the ability of the famous mark to clearly identify and distinguish only one source might be ‘diluted’ or weakened.”\textsuperscript{228} Tarnishment, on the other hand, occurs where a defendant’s use damages “positive [consumer] associations of the mark and . . . harm[s] the reputation of the mark.”\textsuperscript{229}

Since its creation, courts and commentators have expressed their displeasure with dilution doctrine, which is seen as a “fundamental shift” away from basic trademark concepts.\textsuperscript{230} In addition, the fame requirement has been nearly

\textsuperscript{222} Id.
\textsuperscript{223} See Cotter, Prolegomenon, supra note 25, at 783 n.26. These could be considered strong memeplexes, wherein the generic phrases or weak memes attach to the strong memes. \textit{Id.}
\textsuperscript{224} 15 U.S.C. § 1125(c)(1) (2012). The theory was first introduced by Frank Schechter in the 1920s and 1930s through writings and congressional testimony. Frank I. Schecter, The Rational Basis of Trademark Protection, 40 Harv. L. Rev. 813, 830–31 (1927). Dilution has been widely criticized by many as based on outdated rationales. \textit{See}, e.g., Robert G. Bone, Schechter’s Ideas in Historical Context and Dilution’s Rocky Road, 24 Santa Clara Computer & High Tech. L.J. 469, 506 (2007) (stating that “there is no convincing normative account of why trademark law should protect against dilution. . . . [T]he original arguments for protecting against dilution were based on beliefs and modes of justification that are no longer compelling today. Schechter’s pragmatic approach, so congenial to early twentieth century legal realists, does not persuade modern trademark scholars.”).
\textsuperscript{225} See 15 U.S.C. § 1125(c).
\textsuperscript{226} \textit{McCarthy, supra} note 157, § 24:72.
\textsuperscript{228} \textit{McCarthy, supra} note 157, § 24:69. Well-known dilution by blurring examples include DUPONT used for shoes, BUICK used for aspirin, and KODAK used for pianos. \textit{Id.}
\textsuperscript{229} \textit{McCarthy, supra} note 157, § 24:70. A quintessential example of tarnishment is a poster with ENJOY COCAINE in red and white Spenserian script, identical to the COCA-COLA symbol used on products and advertisements. Coca-Cola Co. v. Gemini Rising, Inc., 346 F. Supp. 1183, 1191 (E.D.N.Y. 1972) (noting that “[Coca-Cola's] good will and business reputation are likely to suffer in the eyes of those who, believing it responsible for defendant's poster, will refuse to deal with a company which would seek commercial advantage by treating a dangerous drug in such jocular fashion”).
\textsuperscript{230} See Clarisa Long, Dilution, 106 Colum. L. Rev. 1029, 1029–30 (2006). Some argue that dilution law is “producer-focused rather than consumer-focused,” while others claim that it “is
impossible to explain or define with any degree of consistency.\textsuperscript{231} The TDRA allows for the consideration of:

\begin{itemize}
  \item [(i)] The duration, extent, and geographic reach of advertising and publicity of the mark . . . \textsuperscript{[;]}
  \item [(ii)] The amount, volume, and geographic extent of sales of goods or services offered under the mark[;]
  \item [(iii)] The extent of actual recognition of the mark[; and]
  \item [(iv)] Whether the mark was registered . . . on the principal register \textsuperscript{[with the Trademark Office]}\textsuperscript{232}
\end{itemize}

Because courts have not applied these factors with any degree of uniformity,\textsuperscript{233} irreconcilable trademark precedent is a strong barrier for memetic evolution.

Because trademark law confers the greatest benefits to those with famous trademarks, famous trademark holders are vigilant in their enforcement efforts. This can impact a meme’s selective environment and make competing memes powerless to replicate effectively. Under the TDRA, courts have held that AMERICA’S TEAM for the Dallas Cowboys is famous and was diluted by a trademark registration for AMERICA’S TEAM for t-shirts,\textsuperscript{234} and that THE OTHER WHITE MEAT, a slogan promoting the consumption of pork, is famous and was likely to be diluted by THE OTHER RED MEAT for salmon.\textsuperscript{235} Viewing these dilutive trademarks as memes, such rulings limit their ability to replicate, either perfectly or by mutation. Because of rampant inconsistencies, it is difficult to know when an adopted trademark might dilute another. The threat of litigation will deter
gear toward protecting consumers because diminution of a famous mark’s ability to identify a product increases consumers’ search costs.” \textit{Id.} at 1034–35. This uncertainty is part of the danger of dilution theory, which is designed to apply only under rare circumstances. \textit{Id.} at 1042–43; Port, \textit{supra} note 15, at 874–82 (describing dilution law in general and its unpredictability).


\textsuperscript{233} See Nguyen, \textit{supra} note 231, at 104–10 (discussing how courts have struggled with the question of fame, applying old legal standards that are no longer the law, ignoring the law, or unsuccessfully attempting to apply the law).


business owners from adopting marks that are too similar to the putative famous marks and necessarily preclude the replication of those memes. Broad trademark protection under a dilution theory, therefore, can impede the replication and natural selection process of new memes.

One additional observation is that trademark dilution is designed to apply only in very rare instances. Even if famousness precludes natural selection in these limited instances, many other trademarks that can still benefit from an analysis couched in memetic theory. Included in that number are society-driven words and phrases that happen to go viral before anyone can appropriate trademark rights in those designations. The next Part outlines this phenomenon and proposes one approach for addressing them.

IV. TOWARD A PRAGMATIC APPROACH FOR SOCIETY-DRIVEN TRADEMARKS

While the USPTO does not keep statistics on society-driven trademark applications that arise after the corresponding words or phrases appear in a viral news story, anecdotal evidence strongly suggests that the number of individuals seeking protection for such marks has increased over time. While these were originally called “meme mark’ filings,” by Professor Beebe, this classification is incomplete because, as we have seen, nearly any trademark can be a meme. The key is the rate of replication. Indeed, memes that begin as poor replicators may avoid death as long as they continue to reside in some medium waiting for resuscitation. To account for the replicatory advantage, this article adopts the phrase “viral meme mark” applications. The word “viral” takes into consideration the rapidity with which some trademarks replicate in various environments. The next section outlines the rise of viral meme mark applications filed in the USPTO and the significance of such filings for American trademark law.

A. The Rise of Viral Meme Mark Applications in the USPTO

Viral meme mark applications arise after the corresponding words or catchphrases appear as part of a popular media event. These applications are nearly always based on alleged future use of the mark in commerce, as opposed to actual use. The USPTO has a bifurcated registration process for domestic trademark applications: Section 1(a) applications are based on prior, actual use of the

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236 See Newcomb, supra note 6.
237 Beebe, supra note 24, at 757.
238 See Cotter, Memes, supra note 25, at 353.
239 See 2 HOSSEIN BIDGOLI, THE HANDBOOK OF TECHNOLOGY MANAGEMENT: SUPPLY CHAIN MANAGEMENT, MARKETING AND ADVERTISING, AND GLOBAL MANAGEMENT 442 (2010) (noting that the term “viral” is used with respect to marketing because information spreads “like a ‘virus’ throughout each customer’s social network,” bringing news of the product and service to a wide range of people).
240 See Newcomb, supra note 6.
designation as a trademark in commerce, while Section 1(b) based applications permit an applicant to start the registration process by merely claiming a bona fide intent to use the designation as a trademark at some point in the future. Upon receipt of an application, a Trademark Examiner at the USPTO assesses it to make sure all registration requirements have been met. If the application meets the requirements, then “[n]o trademark . . . shall be refused registration” unless statutorily prohibited. It is, therefore, the USPTO’s burden to prove that a mark should not be registered. Though trademark rights arise through use, and not registration, one benefit of filing a federal trademark application is that it provides nationwide priority in the mark in connection with the goods identified in the application, even if the trademark owner has not yet done business nationwide.

There are two common bases of rejection relevant to viral meme mark applications. First, the USPTO will reject trademark applications that “falsely suggest a connection with persons, living or dead, institutions, beliefs, or national symbols.” Second, the USPTO has the power to refuse registration based on widespread use. Under this rationale, “[t]he more commonly a phrase is used, the less likely that the public will use it to identify only one source and the less likely that it will be recognized by purchasers as a trademark.” These prohibitions have not, however, been consistently effective. The next section provides and fully describes examples of viral meme mark applications and the seemingly disparate results in the USPTO.

1. LET’S ROLL

On September 11, 2001, United Airlines Flight 93 was hijacked as part of a terrorist attack on the United States. One passenger, Todd Beamer, tried to place a call to his home through a telephone located on the plane but was routed to Lisa Jefferson, a phone supervisor. After praying with Jefferson, Beamer told her that

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243 Beebe, supra note 24, at 758.
245 See Mine Safety Appliances Co. v. Elec. Storage Battery Co., 405 F.2d 901, 904 (C.C.P.A. 1969) (“It is our understanding of the Lanham Act that it is for the registration, not the creation, of trademarks. Its terminology—indeed, the history of federal trademark statutes—presupposes the pre-existence of a trademark to be registered.”).
250 Id. at 60.
he and some other passengers were going “to jump the guy with the bomb.” Then, Jefferson heard the sounds of an “awful commotion.” Next, “are you guys ready?” and Beamer yelling, “let’s roll!”—a phrase that he had often used to spur his children to action. The phrase became popular immediately after the details of Flight 93 were made public, and it garnered further attention after President George W. Bush stated his January 29, 2002 State of the Union Address that “America [had] embrac[ed] a new ethic and a new creed: ‘Let’s roll.’” Less than five months after the phrase was used onboard United Airlines Flight 93, fourteen entities and individuals had applied to trademark the phrase, including the Todd M. Beamer Memorial Foundation, Inc., co-founded by Beamer’s wife. The foundation’s application, which was filed on September 26, 2001, was initially successful in the USPTO, and the phrase was subsequently licensed to Wal-Mart and others. Of the fourteen applications in the initial wave of filings, none are currently trademarks.

2. **SHOCK AND AWE**

Shock and awe is a military doctrine popularized in 1996 by Harlan K. Ullman and James P. Wade, Jr., and it is based on the use of massive and overwhelming force, “Rapid Dominance,” and other displays of force during wartime. When President Bush announced the decision to invade Iraq on March 19, 2003, the Bush Administration announced that it would employ a shock and awe strategy to defeat the Iraqi military and Saddam Hussein. Within a month, the USPTO received

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251 Id.
252 Id. at 61.
253 Id.
255 Michael Okwu, Flight 93 Charity Seeks ‘Let’s Roll’ Trademark, CNN (Feb. 2, 2002, 11:10 AM), http://articles.cnn.com/2002-02-02/us/beamer.trademark_l todd-m-beamer-foundation-trademark-lisa-beamer. Interestingly, the first person to file a trademark application was Jack L. Williams, a person unrelated to Todd Beamer, whose application encompassed LET’S ROLL for goods and services related to apparel, namely t-shirts and sweatshirts. Id. When asked about his application and its impact on the Beamer family, he stated that, “I don’t care what your name is, it’s first in, first swim . . . . It’s all about good old American capitalism.” Id.
numerous applications for trademarks using the phrase “shock and awe.” 261 A fireworks company filed the first trademark application on March 20, 2003, the day the United States began bombing Baghdad. 262 Sony Corporation filed the second trademark application on March 21, 2003, for use as the title of a video game. 263 Sony later withdrew the mark amid intense criticism, describing the application as “an exercise of regrettable bad judgment.” 264 Today, most of the “Shock and Awe” applications have been abandoned. 265

3. SEAL TEAM 6

The United States Naval Special Warfare Development Group is the Navy’s very secretive special operations force and the Naval component to United States Special Operations Command. 266 Various SEAL teams operate under the group’s umbrella. 267 The most well known team is SEAL Team 6, which killed Osama bin Laden on May 2, 2011, in a “raid that ended a decade-long manhunt.” 268 Eight trademark applications were filed in the four weeks following Osama bin Laden’s death (seven were for SEAL TEAM 6, and one was for SEAL TEAM RAIDER 6). 269 Disney Enterprises filed three of those applications less than twenty-four hours after bin Laden’s death. 270 After a public outcry, 271 and public statements issued by the...
U.S. Navy.\textsuperscript{272} Disney expressly abandoned its two applications “out of deference to the Navy.”\textsuperscript{273} All of the other applications were also abandoned either through express declarations or failure to respond to certain USPTO requests.\textsuperscript{274}

4. TRAYVON MARTIN

After the fatal shooting of Trayvon Martin by George Zimmerman on February 26, 2012, in Sanford, Florida, public reaction quickly transformed from a passive simmer to a rapid boil as many people raised questions of racial profiling, vigilante justice and inequality.\textsuperscript{275} The story went viral soon after the national media began covering it on March 8, 2012.\textsuperscript{276} Nearly simultaneously, the phrases I AM TRAYVON and JUSTICE FOR TRAYVON appeared as rallying cries on thousands of Facebook pages, as Twitter hashtags, and in the titles of YouTube videos. In addition, T-shirts, sweatshirts and other merchandise with the same phrases became a staple on street corners in Sanford and commonplace at many of the nationwide demonstrations held to express support for Martin and his family.\textsuperscript{277} Roughly three weeks after her son’s death, Martin’s mother, Sybrina Fulton, filed two trademark applications for the phrases I AM TRAYVON\textsuperscript{278} and JUSTICE FOR TRAYVON.\textsuperscript{279} Three other

\textsuperscript{272} Ethan Smith & Julian E. Barnes, \textit{Walt Disney Surrenders to Navy’s SEAL Team 6}, \textit{WALL ST. J.} (May 26, 2011), http://online.wsj.com/article/SB10001424052702304066504576345752703592770.html (quoting chief Navy spokesman Commander Danny Hernandez as saying, “We are fully committed to protecting our trademark rights” in response to Disney's applications).

\textsuperscript{273} Id.

\textsuperscript{274} See TESS search results, \textit{supra} note 269.


\textsuperscript{278} U.S. Trademark Application No. 85,575,974 (filed Mar. 21, 2012) (I AM TRAYON).

\textsuperscript{279} U.S. Trademark Application No. 85,575,890 (filed Mar. 21, 2012) (JUSTICE FOR TRAYVON).
individuals (unconnected to Martin or his family) filed five additional applications employing Martin’s name.280 Fulton, in particular, was sharply criticized by some as attempting to profit from her son’s death and stifling activities designed to spread the broader messages related to racial profiling, vigilantism and inequality.281 Both applications have been published for opposition; if no one opposes the applications within a certain period of time, they will proceed to the final steps of the registration phase.282

B. Memetic Framework for Federal Protection

As illustrated above, the USPTO has allowed a number of viral meme mark applications to issue as trademark registrations.283 Such protection confers nationwide priority in the viral meme mark for the goods outlined in the application once the applicant proves actual use. Though this should not, in most instances, result in the wholesale preclusion of uses unrelated to the goods or services, this is not always the case. For example, though LET’S ROLL was registered for charitable fundraising services, the Todd M. Beamer Memorial Foundation negotiated a license with Florida State University to receive shares of the profits from t-shirts sold bearing the phrase.284 In addition, within days of the applications for I AM TRAYVON and JUSTICE FOR TRAYVON for digital materials and digital media, personalized products like t-shirts, sweatshirts, and the like bearing Martin’s name


282 See supra notes 278–279 (indicating publication for opposition).

283 See supra Part IV.A. Additionally, though the number of resulting registrations may seem low in some cases, this could be attributed to abandonment and is not an affirmative assessment of applications by the USPTO. See, e.g., supra Part IV.A.III (discussing Disney’s abandonment of SEAL TEAM 6 marks). Viral meme mark applications are sometimes abandoned because the applicants fail to timely respond to requests by the USPTO. See id.

284 Sue Chan, The Marketing of “Let’s Roll,” CBS NEWS (Feb. 11, 2009), http://www.cbsnews.com/stories/2002/09/11/september11/main521521.shtml (noting that “[t]he Beamer Foundation agreed it is a tribute, and is now getting a share of the profits from ‘Let’s Roll’ gear sold in Florida State colors”). The football coach, Bobby Bowden, had adopted “Let’s Roll” as the team’s slogan as a tribute to those who died on September 11, 2001. Id.
disappeared from major Internet retailers.\textsuperscript{285} What is more, the potential for over-enforcement of trademarks is high for viral meme marks.\textsuperscript{286}

Considering such applications in terms of memetic theory, the precise evolutionary effect of protection and enforcement (or over-enforcement) of trademarks rights is difficult to forecast.\textsuperscript{287} If, however, we recognize that trademark law can positively or negatively influence memetic natural selection, we can assess the potential impact of broadening trademark protection. For example, if dilution theory accords broad protection beyond any particular goods or services to certain trademarks, arguments can be made that such an extension decreases replication of the strongest memes and can negatively impact natural evolution.\textsuperscript{288} Governing authorities can begin to weigh the public policy concerns, and potential benefits and costs, of implementing trademark policies that can inhibit or support societal and cultural development. The USPTO could consider natural memetic predilections in assessing trademark applications, perhaps by temporarily limiting when such applications can be filed.

CONCLUSION

Acknowledging that memetic theory may play a role in the popularity and growth of trademarks could be a critical step in evaluating the direction of trademark law. Admittedly, there are difficulties and unanswered questions. This Article explores a few of these questions, including the ultimate permanency of memetic theory, whether or not trademarks can function as memes, and the impact of current enforcement mechanisms on natural selection and evolution.\textsuperscript{289} This Article posits that memetic theory can be helpful in determining what replicatory advantages exist between various trademarks (or memes) and also how trademark enforcement and the broadening of trademark protection can threaten the cultural evolution of such marks. In allowing nationwide appropriation of culture-driven words and phrases, it is desirable to clearly delineate and enforce boundaries when putative owners seek federal registration. Many questions remain, and a different perspective that considers memetic theory calls for a reassessment of current trademark standards.

\begin{itemize}
\item\textsuperscript{287} See Cotter, Memes, supra note 25, at 401 (noting that, with respect to copyright law, “specific evolutionary impacts are impossible to predict, and even likely evolutionary directions... can only be assessed in a probabilistic fashion”).
\item\textsuperscript{288} A similar argument could also be made with respect to the “family of marks” doctrine.
\item\textsuperscript{289} Issues still remain. For example, do viral meme marks develop “good tricks,” as earlier posited? Are these marks smaller components of larger memeplexes? Is it possible to adopt “famous” marks and subsequently register them with the USPTO? Though these analyses are beyond the narrow scope of this Article, I plan to address such questions in later work.
\end{itemize}