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## MEMETIC THEORY, TRADEMARKS & THE VIRAL MEME MARK

SHONTAVIA JACKSON JOHNSON

### ABSTRACT

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 &amp; THE VIRAL MEME MARK

SHONTAVIA JACKSON JOHNSON\*

## 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?<sup>1</sup> 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?<sup>2</sup> And, if protection is proper, should Disney have priority over the five other applicants seeking to register the same phrase?<sup>3</sup> Among thirty applicants, how many should be awarded trademark protection for a 9/11 victim’s highly publicized last words, LET’S ROLL?<sup>4</sup> 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?<sup>5</sup> 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.<sup>6</sup> 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 viral<sup>7</sup> news: (1) transient fame for the subjects of the

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<sup>1</sup> See *infra* Part IV.A.4.

<sup>2</sup> See *infra* Part IV.A.3.

<sup>3</sup> *Id.*

<sup>4</sup> See *infra* Part IV.A.1.

<sup>5</sup> See *infra* Part IV.A.2.

<sup>6</sup> 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.*

<sup>7</sup> 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<sup>8</sup> and (2) words and catchphrases that become inextricably linked to that event.<sup>9</sup> Regarding the former, these subjects generally fade from the public eye very quickly.<sup>10</sup> 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.<sup>11</sup> 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.<sup>12</sup>

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.<sup>13</sup> 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.<sup>14</sup> 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.<sup>15</sup>

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.<sup>16</sup> Not only do trademarks provide the commercial benefit of identifying the sources of products, they also have significant societal and cultural value.<sup>17</sup> 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”).

<sup>8</sup> See Lili Levi, *Content: Social Networks and the Law: Social Media and the Press*, 90 N.C. L. REV. 1531, 1553 (2012) (explaining that “[s]ocial media enable viralization and amplification of information immediately,” and that “technology and people’s Facebook-influenced sharing norms mean that the news is more potentially global and certainly more apt to be viral in the world of tweets and social networking”).

<sup>9</sup> See discussion *infra* Part IV.

<sup>10</sup> See Tom Heyden, *Harlem Shake: Tracking a Meme Over a Month*, BBC NEWS MAG., <http://www.bbc.co.uk/news/magazine-21624109> (last updated Mar. 1, 2013, 6:25 AM) (discussing rapid rise and expected downfall of viral video meme).

<sup>11</sup> See, e.g., Garance Franke-Ruta, *Binders Full of Women: A Meme that Means Something*, ATLANTIC MONTHLY (Oct. 17, 2012, 9:02 AM), <http://www.theatlantic.com/politics/archive/2012/10/binders-full-of-women-a-meme-that-means-something/263740/> (analyzing meaning of “binders full of women” meme that arose in the 2012 U.S. presidential debate).

<sup>12</sup> See Patrick Gavin, “Binders Full of Women” Meme Spreads, POLITICO (Oct. 16, 2012, 10:02 PM), <http://www.politico.com/news/stories/1012/82503.html>.

<sup>13</sup> See *infra* Part IV.

<sup>14</sup> See *infra* Part IV.

<sup>15</sup> 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.

<sup>16</sup> See generally ROSEMARY J. COOMBE, *THE CULTURAL LIFE OF INTELLECTUAL PROPERTIES: AUTHORSHIP, APPROPRIATION, AND THE LAW* 6–8 (1998) (describing the interplay between the legal and social aspects of intellectual property law).

<sup>17</sup> *Id.*; Port, *supra* note 15, at 894.

its entirety has an interest in using the cultural and expressive facet of some trademarks.<sup>18</sup> However, as safeguards for trademark owners increase (typically through marketing, advertising, use, and brand loyalty), the space left over for the societal dimension declines.<sup>19</sup> The expansion of trademark protection has significantly weakened the social function of trademarks, particularly as the value of trademarks has exploded in recent years.<sup>20</sup>

Much has been written about the value of trademark protection in the commercial marketplace.<sup>21</sup> Among the factors that may impact the success of a particular trademark are advertising<sup>22</sup> 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."<sup>23</sup> 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.<sup>24</sup> 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.<sup>25</sup> As

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<sup>18</sup> Port, *supra* note 15, at 895. Professor Port further notes that,

[A]lthough 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.

*Id.* Professor Dreyfuss has labeled this kind of trademark use "expressive." Rochelle C. Dreyfuss, *Expressive Generativity: Trademarks as Language in the Pepsi Generation*, 65 NOTRE DAME L. REV. 397, 400–01 (1990).

<sup>19</sup> Port, *supra* note 15, at 894–95; *see also* Ralph S. Brown, Jr., *Advertising and the Public Interest: Legal Protection of Trade Symbols*, 57 YALE L.J. 1165, 1167 (1948), *reprinted in* 108 YALE L.J. 1619, 1621 (1999); Dreyfuss, *supra* note 18, at 424; Jessica Litman, *Breakfast with Batman: The Public Interest in the Advertising Age*, 108 YALE L.J. 1717, 1718 (1999).

<sup>20</sup> Port, *supra* note 15, at 830.

<sup>21</sup> *See, e.g.*, Doris E. Long, *Is Fame All There Is? Beating Global Monopolists at Their Own Marketing Game*, 40 GEO. WASH. INT'L L. REV. 123, 127 (2008) (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").

<sup>22</sup> *See, e.g.*, Dreyfuss, *supra* note 18, at 424 (explaining the relationship between advertising and universal familiarity).

<sup>23</sup> Long, *supra* note 21, at 128 n.20 (citations omitted).

<sup>24</sup> Barton Beebe, *Trademark: Today and Tomorrow: Institute for Intellectual Property & Information Law Symposium: Is the Trademark Office a Rubber Stamp?*, 48 HOUS. L. REV. 751, 757 (2011) (referring to meme mark filings as a "curious—and increasingly notorious—phenomenon").

<sup>25</sup> A handful of legal scholars have used memetics to analyze legal issues, most often with respect to copyright law. *See* Thomas F. Cotter, *Memes and Copyright*, 80 TUL. L. REV. 331, 347 (2005) [hereinafter Cotter, *Memes*]; Thomas F. Cotter, *Prolegomenon to a Memetic Theory of Copyright: Comments on Lawrence Lessig's The Creative Commons*, 55 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.<sup>26</sup> 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.<sup>27</sup> These informational units, called memes, are the cultural parallel of genes.<sup>28</sup> When one person imitates another person, some item (what we call the "meme") is passed to that person.<sup>29</sup> This meme may be a phrase, catchy jingle, behavior, or information.<sup>30</sup> It can be passed on and imitated many times.<sup>31</sup> Ultimately the meme is no longer controllable by any one individual.<sup>32</sup> Memetic theory suggests that memes reproduce and evolve in a manner similar to genes.<sup>33</sup> In the trademark context, memetic theory suggests memes are a critical component of a trademark's popularity and success.<sup>34</sup> 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

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[hereinafter Cotter, *Prolegomenon*]; David A. Simon, *Culture, Creativity, & Copyright*, 29 CARDOZO ARTS & ENT. L. J. 279, 313 (2011); Michael S. Fried, *The Evolution of Legal Concepts: The Memetic Perspective*, 39 JURIMETRICS J. 291, 307 (1999); Neal A. Gordon, *The Implications of Memetics for the Cultural Defense*, 50 DUKE L.J. 1809, 1812 (2000); Jeffery E. Stake, *Are We Buyers or Hosts? A Memetic Approach to the First Amendment*, 52 ALA. L. REV. 1213, 1241 (2001).

<sup>26</sup> See Beebe, *supra* note 24, at 757, 757 nn.35 & 36.

<sup>27</sup> See RICHARD BRODIE, *VIRUS OF THE MIND: THE NEW SCIENCE OF THE MEME* 4–5 (1996).

<sup>28</sup> See *infra* Part I (exploring widespread debate regarding how to define the meme). See generally ROBERT AUNGER, *THE ELECTRIC MEME: A NEW THEORY OF HOW WE THINK* 22–23 (2002) [hereinafter AUNGER, *ELECTRIC MEME*]; SUSAN BLACKMORE, *THE MEME MACHINE* 4–18, (1999); BRODIE, *supra* note 27, at 5–14; DARWINIZING CULTURE: THE STATUS OF MEMETICS AS A SCIENCE 228–29 (Robert Aunger ed., 2000); RICHARD DAWKINS, *THE SELFISH GENE* (30th anniversary ed., 2006) [hereinafter DAWKINS, *SELFISH GENE*]; DANIEL C. DENNETT, *DARWIN'S DANGEROUS IDEA: EVOLUTION AND THE MEANINGS OF LIFE* 335–69 (1995); KATE DISTIN, *THE SELFISH MEME: A CRITICAL REASSESSMENT* 5–17 (2005); AARON LYNCH, *THOUGHT CONTAGION* 1–16 (1996).

<sup>29</sup> See BLACKMORE, *supra* note 28, at 4.

<sup>30</sup> *Id.*

<sup>31</sup> *Id.*

<sup>32</sup> *Id.* (stating that the meme begins to "take on a life of its own").

<sup>33</sup> 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.

<sup>34</sup> 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.<sup>35</sup> Since 1976, when Oxford biologist Richard Dawkins used genetic evolution as a segue for creating the meme neologism in his book *The Selfish Gene*,<sup>36</sup> biologists, psychologists, philosophers, and scientists have used it to flesh out the implications of new models of consciousness and thought.<sup>37</sup> 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*.<sup>38</sup> 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.<sup>39</sup> 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.<sup>40</sup> The creatures with these beneficial variations would necessarily have the best probability of survival and create children with the same characteristics.<sup>41</sup> This was the principle Darwin called natural selection—forces of nature must have been driving the selection, not individual creatures.<sup>42</sup>

Darwin's natural selection principle mandates "variation, selection, and retention (or heredity)."<sup>43</sup> Variation must occur so that not all beings are alike.<sup>44</sup> Regarding selection, some creatures must survive more successfully in a particular environment than others.<sup>45</sup> Finally, retention requires a method where parents pass characteristics on to their children.<sup>46</sup> If each of these features exist, "then any

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<sup>35</sup> See Cotter, *Prolegomenon*, *supra* note 25, at 781.

<sup>36</sup> DAWKINS, *SELFISH GENE*, *supra* note 28.

<sup>37</sup> See BRODIE, *supra* note 27, at 5–11.

<sup>38</sup> CHARLES DARWIN, *ON THE ORIGIN OF SPECIES BY MEANS OF NATURAL SELECTION* (1859).

<sup>39</sup> BLACKMORE, *supra* note 28, at 10.

<sup>40</sup> *Id.*

<sup>41</sup> *Id.*

<sup>42</sup> See *id.*; see also BRODIE, *supra* note 27, at 49.

<sup>43</sup> See BLACKMORE, *supra* note 28, at 10–11.

<sup>44</sup> See BLACKMORE, *supra* note 28, at 10.

<sup>45</sup> *Id.*

<sup>46</sup> See *id.* at 10–11.

characteristics that are positively useful for survival in that environment must tend to increase.”<sup>47</sup>

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.<sup>48</sup>

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.<sup>49</sup> It could then create offspring who also exploit the others, which would destroy the former evolutionary benefit.<sup>50</sup> 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.<sup>51</sup> 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].”<sup>52</sup> In other words, natural selection chooses which genes, and not which creatures, survive or die.<sup>53</sup> This view is called “selfish-gene theory.”<sup>54</sup> The term selfish, as used by Dawkins, means that genes exist only to replicate and be transferred to offspring.<sup>55</sup>

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<sup>47</sup> *Id.* at 11.

<sup>48</sup> See generally GEORGE C. WILLIAMS, ADAPTATION AND NATURAL SELECTION (1966); BLACKMORE, *supra* note 28, at 4.

<sup>49</sup> See BLACKMORE, *supra* note 28, at 4.

<sup>50</sup> 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.

*Id.*

<sup>51</sup> See *id.* at 335–37.

<sup>52</sup> BLACKMORE, *supra* note 28, at 4–5.

<sup>53</sup> 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.”).

<sup>54</sup> BRODIE, *supra* note 27, at 51.

<sup>55</sup> See *id.* at 52.



In the last chapter of *The Selfish Gene*, Dawkins pondered whether other “new replicators” exist that behave like genes.<sup>56</sup> 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.”<sup>57</sup> More recently, many scholars have interpreted Dawkins’ requirements as encompassing replication, variation, and selection.<sup>58</sup> First, replication means that “the entity must reproduce with sufficient fidelity, fecundity, and longevity to pass on copies of itself to ‘offspring.’”<sup>59</sup> Second, variation requires that the entity sometimes replicate imperfectly, most often through mutation.<sup>60</sup> This may occur either by accident or through deliberate modification.<sup>61</sup> 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.<sup>62</sup> 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.<sup>63</sup> Some replicators are noticed by a person, remembered, and subsequently passed on to others, while others do not get noticed or imitated by anyone.<sup>64</sup>

According to Dawkins, if an entity meets all three requirements, it should also be considered a selfish replicator capable of evolution by natural selection.<sup>65</sup> 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*.<sup>66</sup>

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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<sup>56</sup> DAWKINS, *SELFISH GENE*, *supra* note 28, at 189–201.

<sup>57</sup> *Id.* at 194.

<sup>58</sup> Cotter, *Memes*, *supra* note 25, at 337. Some scholars have suggested different or additional conditions. See STEPHEN J. GOULD, *THE STRUCTURE OF EVOLUTIONARY THEORY* 13 (2002); William H. Calvin, *The Six Essentials? Minimal Requirements for the Darwinian Bootstrapping of Quality*, 1 J. MEMETICS 3, Part 4 (1997), available at [http://cfpm.org/jom-emit/1997/vol1/calvin\\_wh.html](http://cfpm.org/jom-emit/1997/vol1/calvin_wh.html).

<sup>59</sup> 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.

<sup>60</sup> See Cotter, *Memes*, *supra* note 25, at 337; Simon, *supra* note 25, at 287–88.

<sup>61</sup> Simon, *supra* note 25, at 288.

<sup>62</sup> See *id.*

<sup>63</sup> See Cotter, *Memes*, *supra* note 25, at 337.

<sup>64</sup> See BLACKMORE, *supra* note 28, at 14.

<sup>65</sup> 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).

<sup>66</sup> DAWKINS, *SELFISH GENE*, *supra* note 28, at 192 (alterations in original).

fashions, [or] ways of making pots or of building arches.”<sup>67</sup> 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?*<sup>68</sup> 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.<sup>69</sup>

According to the biological definition, the “meme is [a] basic unit of cultural transmission, or imitation.”<sup>70</sup> This definition is along the lines of Dawkins’ original proposition and seemingly endorsed by him in later work.<sup>71</sup> Under this definition, “everything we call ‘culture’ is composed of atomlike memes, which compete with one another.”<sup>72</sup> These memes are transferred from brain to brain.<sup>73</sup> 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.).<sup>74</sup> 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.<sup>75</sup> As such, it is useful to consider other definitions.

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

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<sup>67</sup> *Id.* Dawkins mentions that scientific ideas, religions, and fashion could fall within the memetic framework. *Id.* at 192–93.

<sup>68</sup> See BLACKMORE, *supra* note 28, at 63; Luis Benítez-Bribiesca, *Memetics: A Dangerous Idea*, 26 INTERCIENCIA 1, 30 (2001).

<sup>69</sup> See Cotter, *Memets*, *supra* note 25, at 340–43 (discussing various definitional theories and critiques); Simon, *supra* note 25, at 354–68 (describing various objections to memetics).

<sup>70</sup> BRODIE, *supra* note 27, at 5; see also RICHARD DAWKINS, *THE EXTENDED PHENOTYPE: THE GENE AS THE UNIT OF SELECTION* 109 (1982) [hereinafter DAWKINS, *EXTENDED PHENOTYPE*].

<sup>71</sup> 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, *Memets*, *supra* note 25, at 340.

<sup>72</sup> See BRODIE, *supra* note 27, at 5.

<sup>73</sup> *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://pespmc1.vub.ac.be/MEMLEX.html>.

<sup>74</sup> See BRODIE, *supra* note 27, at 5–6.

<sup>75</sup> *Id.* at 6.

<sup>76</sup> *Id.*

representation of knowledge” residing in the mind.<sup>77</sup> This definition focuses on the similarity between memes and genes.<sup>78</sup> 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.<sup>79</sup> 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.”<sup>80</sup> 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.<sup>81</sup>

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,”<sup>82</sup> the smallest of which “replicate themselves with reliability and fecundity.”<sup>83</sup> Using this approach, memes spread,<sup>84</sup> “propagat[ing] themselves from brain to brain, from brain to book, from book to brain, from brain to computer, [or] from computer to computer.”<sup>85</sup> 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.”<sup>86</sup> Memes under this approach, therefore, are “substrate neutral’, capable of existing in, and spreading” among brains, behavior, and objects.<sup>87</sup> For example, say the first person whose brain transported the “spoked wheel meme” builds one spoke-wheeled wagon.<sup>88</sup> 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.<sup>89</sup> 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].”<sup>90</sup>

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,<sup>91</sup> the psychological definition provides a lens into the inner-

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<sup>77</sup> *Id.* At least one legal scholar has seemingly endorsed this view. See Simon, *supra* note 25, at 289 (“One helpful way to think about memes is as little organisms with which we have a mostly mutualistic symbiotic relationship.”).

<sup>78</sup> See BRODIE, *supra* note 27, at 6.

<sup>79</sup> *Id.* at 6–7.

<sup>80</sup> *Id.* at 7.

<sup>81</sup> See, e.g., *id.* at 8.

<sup>82</sup> *Id.*

<sup>83</sup> DENNETT, *supra* note 28, at 344.

<sup>84</sup> BRODIE, *supra* note 27, at 9.

<sup>85</sup> RICHARD DAWKINS, *THE BLIND WATCHMAKER: WHY THE EVIDENCE OF EVOLUTION REVEALS A UNIVERSE WITHOUT DESIGN* 225 (1986).

<sup>86</sup> BRODIE, *supra* note 27, at 9.

<sup>87</sup> Cotter, *Memes*, *supra* note 25, at 340.

<sup>88</sup> See BRODIE, *supra* note 27, at 9.

<sup>89</sup> See *id.*

<sup>90</sup> *Id.*

<sup>91</sup> *Id.* at 5.

workings of the human brain,<sup>92</sup> 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.<sup>93</sup> 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.<sup>94</sup> 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.”<sup>95</sup>

### *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.<sup>96</sup> In memetic terms, all culture is created by replication.<sup>97</sup> The memes that succeed through widespread imitation have best evolved for replication and communication.<sup>98</sup> When that meme releases subsequent replicators, it begins “to ‘have a life of [its] own.’”<sup>99</sup> 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.<sup>100</sup>

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<sup>92</sup> *Id.* at 6.

<sup>93</sup> See BLACKMORE, *supra* note 28, at 66.

<sup>94</sup> Simon M. Reader & Kevin N. Laland, *Do Animals Have Memes?*, 3 J. MEMETICS 100, Part 2 (1999), available at [http://cfpm.org/jom-emit/1999/vol3/reader\\_sm&laland\\_kn.html](http://cfpm.org/jom-emit/1999/vol3/reader_sm&laland_kn.html). Though this article limits its analysis to humans, memetics could arguably reach many different species. See David L. Hull, *Taking Memetics Seriously: Memetics Will Be What We Make It*, in DARWINIZING CULTURE: THE STATUS OF MEMETICS AS A SCIENCE, *supra* note 28, at 45–46.

<sup>95</sup> 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”).

<sup>96</sup> See Simon, *supra* note 25, at 283.

<sup>97</sup> 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.”).

<sup>98</sup> See Fried, *supra* note 25, at 298.

<sup>99</sup> BLACKMORE, *supra* note 28, at 29.

<sup>100</sup> 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.<sup>101</sup> To be successful, however, memes must replicate—this is ultimately their only function.<sup>102</sup>

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) “chang[ing] the selective environment to the detriment of competing memes”; or (4) “answer[ing] questions that the human brain finds of interest.”<sup>103</sup>

Not every thing or idea, however, is a meme.<sup>104</sup> 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.<sup>105</sup> 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.<sup>106</sup>

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.<sup>107</sup> Memes that make factual claims are not factual, accurate, or true just because they successfully spread to others.<sup>108</sup> 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.”<sup>109</sup> Common examples of successful, yet harmful, memes include Nazism, suicide bombing, airline hijacking, and computer viruses.<sup>110</sup> These replicators get copied as long as they have the equipment needed for copying.<sup>111</sup> 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.”<sup>112</sup> Nonetheless, meme success will not inevitably correlate with benefits to the holder.<sup>113</sup>

It is also important to note that memes are not always isolated, individual entities; groups of memes can join and replicate together.<sup>114</sup> Dawkins referred to

<sup>101</sup> *Id.*

<sup>102</sup> 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.”).

<sup>103</sup> Cotter, *Memes*, *supra* note 25, at 338–39, 345 (footnotes omitted).

<sup>104</sup> Stake, *supra* note 25, at 1225.

<sup>105</sup> *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 an intelligible form of expression).

<sup>106</sup> *Id.* at 1225.

<sup>107</sup> Fried, *supra* note 25, at 298; see also Stake, *supra* note 25, at 1239–40.

<sup>108</sup> Fried, *supra* note 25, at 298.

<sup>109</sup> *Id.* at 298–99.

<sup>110</sup> See BRODIE, *supra* note 27, at 15, 36; Dennett, *supra* note 28, at 363.

<sup>111</sup> See BLACKMORE, *supra* note 28, at 13.

<sup>112</sup> DAWKINS, *EXTENDED PHENOTYPE*, *supra* note 70, at 110.

<sup>113</sup> 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.”).

<sup>114</sup> 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.”<sup>115</sup> 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.<sup>116</sup> The quintessential example offered by meme theorists is that of the computer virus.<sup>117</sup> 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.<sup>118</sup> 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.<sup>119</sup> 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.<sup>120</sup> The chain letter memeplex forces replication by declaring that a person’s well-being depends on her forwarding or sharing it with others.<sup>121</sup>

#### D. Criticisms of Memetic Theory

Memetic theory has, predictably, been the subject of significant criticism from the scientific community.<sup>122</sup> 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,<sup>123</sup> and the relative size and scope of the meme.<sup>124</sup> This section outlines these criticisms and responses from meme theorists.

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<sup>115</sup> 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).

<sup>116</sup> 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](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”).

<sup>117</sup> See BLACKMORE, *supra* note 28, at 20.

<sup>118</sup> See *id.*; BRODIE, *supra* note 27, at 42.

<sup>119</sup> See, e.g., Frank Thorsberg, *The World’s Worst Viruses*, PCWORLD (Aug. 23, 2002, 1:00 AM), [www.pcworld.com/article/103992/article.html](http://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.*

<sup>120</sup> See Charles H. Bennett et al., *Chain Letters & Evolutionary Histories*, SCI. AM., June 2003, at 76–81, available at <http://clair.si.umich.edu/si767/papers/Week12/msa/Bennett.pdf>; Fried, *supra* note 25, at 300.

<sup>121</sup> Fried, *supra* note 25, at 300.

<sup>122</sup> See, e.g., Benítez-Bribiesca, *supra* note 68, at 31. Dr. Benítez-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.*

<sup>123</sup> See Simon, *supra* note 25, at 360–62 (discussing the now-discredited theory of evolution created by the French biologist Jean-Baptiste Lamarck); ALPHEUS S. PACKARD, LAMARCK: THE FOUNDER OF EVOLUTION: HIS LIFE AND WORK 357–71 (1901).

<sup>124</sup> 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.<sup>125</sup> According to some critics, memes cannot possibly replicate themselves with the degree of accuracy of genetic evolution.<sup>126</sup> Without a structural counterpart similar to DNA, critics argue that effective variation cannot occur because the meme lacks a “precise copying mechanism.”<sup>127</sup> 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.<sup>128</sup> 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.<sup>129</sup>

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.”<sup>130</sup> 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.<sup>131</sup>

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<sup>125</sup> See, e.g., Benítez-Bribiesca, *supra* note 68, at 30.

<sup>126</sup> 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).

<sup>127</sup> 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 analogous symbols that might rapidly decay into noise as they are transmitted from individual to individual.”).

<sup>128</sup> Cotter, *Memes*, *supra* note 25, at 342 (footnotes omitted).

<sup>129</sup> See *supra* note 60 and accompanying text.

<sup>130</sup> Cotter, *Memes*, *supra* note 25, at 343 (emphasis added).

<sup>131</sup> 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.<sup>132</sup>

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.<sup>133</sup> 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.<sup>134</sup> Several scholars have noted that the differences between genes and memes become most clear with respect to claims of Lamarckianism.<sup>135</sup> 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.<sup>136</sup> Memes, however, reproduce by imitation, not via sperm and egg, and there are no scientific reasons that replication differences preclude Darwinian-type evolution.<sup>137</sup>

One final criticism exists because there is no clear consensus on the requisite size of the meme.<sup>138</sup> 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.<sup>139</sup> 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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<sup>132</sup> See AUNGER, *ELECTRIC MEME*, *supra* note 28, at 275; Simon, *supra* note 25, at 356–57. James Watson and Francis Crick discovered the double-helix structure of DNA in 1953. Leslie A. Pray, *Discovery of DNA Structure and Function: Watson and Crick*, 1 *NATURE EDUC.* (2008), available at <http://www.nature.com/scitable/topicpage/discovery-of-dna-structure-and-function-watson-397>.

<sup>133</sup> See Simon, *supra* note 25, at 360 (citing Packard, *supra* note 123, at 357–71).

<sup>134</sup> *Id.* at 361.

<sup>135</sup> See *id.*; BLACKMORE, *supra* note 28, at 59–62.

<sup>136</sup> Simon, *supra* note 25, at 361.

<sup>137</sup> *Id.*

<sup>138</sup> See Benítez-Bribiesca, *supra* note 68, at 30; Cotter, *Memes*, *supra* note 25, at 350; Simon, *supra* note 25, at 354–55.

<sup>139</sup> 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.<sup>140</sup>

In asking “how long is ‘long enough?’” with respect to meme size, Dawkins noted that the answer will vary from example to example.<sup>141</sup> Similar inherent fluidities, however, about what should be considered a gene have not hindered scientific advancement in the relevant fields.<sup>142</sup> 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.”<sup>143</sup> Dawkins has explained that a “single phrase of Beethoven’s ninth symphony” is the equivalent of one meme.<sup>144</sup> 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.<sup>145</sup>

Finally, several scholars have proposed that a single word can function as a meme.<sup>146</sup> 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.”<sup>147</sup> 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.<sup>148</sup> Likewise, memetics has the capacity to describe what causes human beings to replicate and transmit some trademarks but

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<sup>140</sup> DAWKINS, SELFISH GENE, *supra* note 28, at 35.

<sup>141</sup> *Id.* at 36.

<sup>142</sup> 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”).

<sup>143</sup> DENNETT, *supra* note 28, at 344.

<sup>144</sup> 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.

<sup>145</sup> BLACKMORE, *supra* note 28, at 54.

<sup>146</sup> Cotter, *Memes*, *supra* note 25, at 351.

<sup>147</sup> DAWKINS, SELFISH GENE, *supra* note 28, at 195.

<sup>148</sup> See Cotter, *Prolegomenon*, *supra* note 25, at 782–83 (offering a memetic explanation for the spread of religious doctrines).

not others.<sup>149</sup> If a trademark can be a meme on its own, or attach to a popular memplex, 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.<sup>150</sup> Their power to generate brand loyalty makes them important in the competition for consumer attention and ultimately consumer dollars.<sup>151</sup> 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.<sup>152</sup> 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,<sup>153</sup> it is conceivable that trademarks could fall within the term's scope. Dawkins initially identified tunes and catchphrases as two examples of memes,<sup>154</sup> and other scholars have suggested that single words can be memes.<sup>155</sup> The Lanham Act defines trademarks as designations including "any word, name, symbol, or device, or any combination thereof."<sup>156</sup> 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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<sup>149</sup> See BLACKMORE, *supra* note 28, at 14.

<sup>150</sup> See Long, *supra* note 21, at 133–34.

<sup>151</sup> See *id.* at 133–35.

<sup>152</sup> See *infra* Part II.B.

<sup>153</sup> 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.*

<sup>154</sup> DAWKINS, SELFISH GENE, *supra* note 28, at 192.

<sup>155</sup> See, e.g., Cotter, *Memes*, *supra* note 25, at 350.

<sup>156</sup> 15 U.S.C. § 1127 (2012).

### 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.<sup>157</sup> 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.<sup>158</sup> 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.<sup>159</sup> 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.”<sup>160</sup> 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.<sup>161</sup>

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.”<sup>162</sup> This category of trademarks includes fanciful, arbitrary, and suggestive marks.<sup>163</sup> 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.<sup>164</sup> 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.<sup>165</sup> Marks are suggestive “if [they require] imagination, thought and perception to reach a conclusion as to the nature of goods.”<sup>166</sup>

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<sup>157</sup> 3 J. THOMAS MCCARTHY, MCCARTHY ON TRADEMARKS AND UNFAIR COMPETITION § 4:19 (4th ed. 2004).

<sup>158</sup> 15 U.S.C. § 1127. The reflections in this Article, however, could apply to the entire range, including service marks, trade names, certification and collective marks, and trade dress. MCCARTHY, *supra* note 157 § 4:19.

<sup>159</sup> *See id.* (requiring use in commerce); *Two Pesos, Inc. v. Taco Cabana, Inc.*, 505 U.S. 763, 767–70 (1992) (explaining alternative requirements of inherent and acquired distinctiveness).

<sup>160</sup> *Columbia Mill Co. v. Alcorn*, 150 U.S. 460, 463–64 (1893) (emphasis added).

<sup>161</sup> 15 U.S.C. § 1127. Even when an “intent-to-use” application is filed, registration will not issue until the applicant confirms actual use. *See Amy B. Cohen, Intent to Use: A Failed Experiment?*, 35 U.S.F. L. REV. 683, 692–93; *see also Port, supra* note 15, at 835–36.

<sup>162</sup> MCCARTHY, *supra* note 157, § 16:4.

<sup>163</sup> *Id.*; *Two Pesos*, 505 U.S. at 768–69.

<sup>164</sup> MCCARTHY, *supra* note 157, § 11:4; *Eli Lilly & Co. v. Natural Answers, Inc.*, 233 F.3d 456, 462 (7th Cir. 2000) (finding PROZAC for anti-depressant fanciful); *Pfizer Inc. v. Sachs*, 652 F. Supp. 2d 512, 520 (S.D.N.Y. 2009) (finding VIAGRA for erectile dysfunction drug fanciful).

<sup>165</sup> 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.<sup>167</sup> 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.”<sup>168</sup>

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,<sup>169</sup> the vertical opening motion of Lamborghini’s car doors,<sup>170</sup> Christian Louboutin’s contrasting red outsole on women’s shoes,<sup>171</sup> or the Metro-Goldwyn-Mayer (“MGM”) lion’s roar.<sup>172</sup>

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.<sup>173</sup> Thus, even a short musical sequence can be a meme if it is culturally significant to the listener.<sup>174</sup> Indeed, if one hears “*twinkle, twinkle, little star,*” that person may continue humming “*how I wonder what you are*” because of an independent, memorizable meaning from childhood.<sup>175</sup>

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Star Milling Co. v. Allen & Wheeler Co., 208 F. 513, 517 (7th Cir. 1913), *aff’d*, 240 U.S. 403 (1916) (discussing arbitrary marks).

<sup>166</sup> Abercrombie & Fitch Co. v. Hunting World, Inc., 537 F.2d 4, 11; *see also* MCCARTHY, *supra* note 157 § 11:62; Sinhdarella, Inc. v. Vu, No. C 07-04353 WHA, 2008 WL 410246, at \*3 (N.D. Cal. Feb. 12, 2008) (finding BOILING CRAB for seafood restaurants suggestive); Louis Rich, Inc. v. Horace W. Longacre, Inc., 423 F. Supp. 1327, 1337–38 (E.D. Pa. 1976) (finding GOBBLE-GOBBLE for processed turkey meat suggestive).

<sup>167</sup> *See* 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. MCCARTHY, *supra* note 157, at § 15:1 (footnotes omitted).

<sup>168</sup> MCCARTHY, *supra* note 157, § 15:5 (outlining some of the varied approaches to secondary meaning).

<sup>169</sup> U.S. Trademark No. 2,085,197 (filed Dec. 15, 1994) (Coca-Cola Bottle Shape).

<sup>170</sup> U.S. Trademark No. 2,793,439 (filed Dec. 28, 1999) (Lamborghini door opening).

<sup>171</sup> U.S. Trademark No. 3,361,597 (filed Mar. 27, 2007) (Louboutin red sole); *see also* Christian Louboutin S.A. v. Yves Saint Laurent Am. Holdings, Inc., 696 F.3d 206, 229 (2d Cir. 2012).

<sup>172</sup> U.S. Trademark No. 1,395,550 (filed Aug. 15, 1985) [hereinafter No. ‘550] (MGM lion’s roar).

<sup>173</sup> *See, e.g.*, J.M. BALKIN, CULTURAL SOFTWARE: A THEORY OF IDEOLOGY 47 (1998).

<sup>174</sup> *Id.* On the other hand, some scholars have been hesitant to include such small elements in the definition of memes. *See, e.g.*, 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.” *See* Cotter, *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.” *Id.* at 350.

<sup>175</sup> *See* BALKIN, *supra* note 173, at 47; BLACKMORE, *supra* note 28, at 7 (discussing the song *Happy Birthday to You*).

The ultimate function of a trademark is to cause a consumer to mentally associate a particular product with that mark.<sup>176</sup> 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.<sup>177</sup> 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.<sup>178</sup> 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.<sup>179</sup>

Memetic theory can also apply to non-traditional trademarks other than words and phrases, such as the MGM lion's roar.<sup>180</sup> 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.<sup>181</sup> 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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<sup>176</sup> See MCCARTHY, *supra* note 157 § 3:6.

<sup>177</sup> *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").

<sup>178</sup> See, e.g., JOE L. KINCHELOE, *THE SIGN OF THE BURGER: MCDONALD'S AND THE CULTURE OF POWER 2* (2002) (citation omitted) (noting that some "identify [MCDONALD'S] as the most important signifier around the world for free market capitalism").

<sup>179</sup> See *supra* Section I.B.

<sup>180</sup> 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 (abscissa) with a frequency response from 25 Hz to 12.5 Hz with measurable harmonics 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.

<sup>181</sup> See *About MGM*, MGM, <http://www.mgm.com/#!/about/mgm-history> (last visited Aug. 31, 2013).

appropriately exist.<sup>182</sup> 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.<sup>183</sup> 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<sup>184</sup> 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.<sup>185</sup> Of the videos posted, a number of them included exact reproductions of the lion's roar from past MGM films.<sup>186</sup> 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).<sup>187</sup>

Variation, as a separate condition, requires that the trademark occasionally replicate imperfectly, usually by accident or through "conscious adaptation."<sup>188</sup> 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.<sup>189</sup> 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."<sup>190</sup> In one example, a court denied trademark protection for the term INTELLIGENCE EVERYWHERE because the putative

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<sup>182</sup> See *supra* notes 58–66 and accompanying text; DAWKINS, SELFISH GENE, *supra* note 28, at 189–201.

<sup>183</sup> See *supra* note 59 and accompanying text.

<sup>184</sup> *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").

<sup>185</sup> YOUTUBE.COM, <http://www.youtube.com> (type "mgm lion roar" in search field at the top of the page) (last visited Aug. 31, 2013).

<sup>186</sup> See *id.* (including the lion's roar from films released in 1928, 1934, 1982, and 2008).

<sup>187</sup> Both of these instances resulted in lawsuits in which McDonald's successfully forced the businesses to change their names. See *Quality Inns 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).

<sup>188</sup> Simon, *supra* note 25, at 288.

<sup>189</sup> 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).

<sup>190</sup> *Id.* (citations omitted).

owner's use was too sporadic and lacked a "consistent" pattern of use.<sup>191</sup> 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.<sup>192</sup> As such, a designation will typically not be protected under trademark law if it has not been used consistently.<sup>193</sup>

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.<sup>194</sup>

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."<sup>195</sup> 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.<sup>196</sup> What is more, MGM has used variations of the lion's roar in specific films. For example, in the 1935 film *A Night at the Opera*, it is Groucho Marx, and not a lion, who roars in the opening trailer.<sup>197</sup> In certain *Tom and Jerry* theatrical features from the 1960s, it is Tom the cat who hisses and meows during the opening.<sup>198</sup> The

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<sup>191</sup> *Id.* at 341–44.

<sup>192</sup> *Id.* at 342.

<sup>193</sup> 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." *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").

<sup>194</sup> *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).

<sup>195</sup> *Id.* at 1461.

<sup>196</sup> See Ed Vigdor, *MGM Logo History and the 2008 Restoration Process*, COATES NOTES BLOG, <http://garycoates.files.wordpress.com/2010/02/logo-history-restoration-article.pdf> (last visited Aug. 31, 2013).

<sup>197</sup> See Sean Beard, et al., *Logo Variations: Metro-Goldwyn-Mayer Pictures*, CLG WIKI <http://www.closinglogos.com/page/Logo+Variations+-+Metro-Goldwyn-Mayer+Pictures> (last visited , 2013).

<sup>198</sup> *Id.*

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.”<sup>199</sup> Certain memes are passed on to other people quickly and go viral, while others do not get copied at all.<sup>200</sup> 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.<sup>201</sup> 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.<sup>202</sup> Because trademarks are ultimately a practical way of connecting with individual consumers, scholars have noted that they are “powerful forces” even when unwarranted.<sup>203</sup> “[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.<sup>204</sup> McDonald's, for example, has some of the most popular trademarks and brands around the globe,<sup>205</sup> even though the quality of its food offerings is a subjective determination. This reality certainly provides the trademark McDONALD'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.<sup>206</sup> 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.<sup>207</sup> Strong memes, like trademarks, have the highest levels of memorability and infectiousness.<sup>208</sup> Those that also have the most interactions between hosts will prevail.<sup>209</sup>

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<sup>199</sup> Cotter, *Memes*, *supra* note 25, at 337.

<sup>200</sup> *See supra* note 64 and accompanying text.

<sup>201</sup> *See Long, supra* note 21, at 128–29, 134.

<sup>202</sup> Dreyfuss, *supra* note 18, at 402, 402 n.25, 416; *Long supra* note 21, at 135 (discussing consumer loyalty).

<sup>203</sup> *See, Long, supra* note 21, at 135.

<sup>204</sup> *Id.*

<sup>205</sup> *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”).

<sup>206</sup> *See supra* notes 58–66 and accompanying text; *see generally* DAWKINS, SELFISH GENE, *supra* note 28, at 189–201.

<sup>207</sup> *See generally, Long, supra* note 21, at 125–26.

<sup>208</sup> *See DENNETT, supra* note 28, at 344 (referring to memes as “distinct memorable units”) (emphasis omitted).

<sup>209</sup> Kevin N. Laland & John Odling-Smee, *The Evolution of the Meme*, in DARWINIZING CULTURE, *supra* note 28, at 134.



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.<sup>210</sup> Whether individual trademarks can strike the appropriate balance is not always clear.<sup>211</sup> 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.<sup>212</sup> 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.”<sup>213</sup> Federal courts have developed a factor-based test that determines likelihood of confusion.<sup>214</sup>

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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<sup>210</sup> See DAWKINS, *SELFISH GENE*, *supra* note 28, at 193–94.

<sup>211</sup> 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.

<sup>212</sup> See MCCARTHY, *supra* note 157, § 23:1. This is true under common law, state law and federal law. *Id.*

<sup>213</sup> *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]”).

<sup>214</sup> *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.”<sup>215</sup> 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.<sup>216</sup> 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.<sup>217</sup> 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.<sup>218</sup> 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.”<sup>219</sup> 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.<sup>220</sup> In this manner, trademark owners can capitalize on the societal prominence of their marks and expand the enforceable reach of these marks.<sup>221</sup> As a result, the justifications that formerly

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<sup>215</sup> Cotter, *supra* note 25, at 382.

<sup>216</sup> *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).

<sup>217</sup> 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.”).

<sup>218</sup> 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).

<sup>219</sup> See *supra* note 187 and accompanying text.

<sup>220</sup> See *Geoffrey, Inc. v. Stratton*, 16 U.S.P.Q.2d 1691, 1696 (C.D. Cal. 1990) (holding that defendant’s use of PHONES-R-US for telephones infringed Geoffrey, Inc.’s family of “R” US marks).

<sup>221</sup> 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.<sup>222</sup> This expansion modifies the natural selection environment because competing memes on unrelated goods are essentially powerless to compete with a family of marks.<sup>223</sup>

### 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.”<sup>224</sup> Federal dilution claims were not created until 1995 and were considerably revised by the Federal Trademark Dilution Revision Act of 2006 (“TDRA”).<sup>225</sup> 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.<sup>226</sup> Upon a showing of fame, the trademark owner must next prove dilution by either blurring or tarnishment.<sup>227</sup> 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.”<sup>228</sup> 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.”<sup>229</sup>

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.<sup>230</sup> In addition, the fame requirement has been nearly

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<sup>222</sup> *Id.*

<sup>223</sup> See Cotter, *Prolegomenon*, supra note 25, at 783 n.26. These could be considered strong memplexes, wherein the generic phrases or weak memes attach to the strong memes. *Id.*

<sup>224</sup> 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. Schechter, *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. 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.”).

<sup>225</sup> See 15 U.S.C. § 1125(c).

<sup>226</sup> MCCARTHY, supra note 157, § 24:72.

<sup>227</sup> See 15 U.S.C. § 1125(c)(2).

<sup>228</sup> 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. *Id.*

<sup>229</sup> 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”).

<sup>230</sup> 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.<sup>231</sup> The TDRA allows for the consideration of:

[A]ll relevant factors, including the following:

- (i) The duration, extent, and geographic reach of advertising and publicity of the mark . . . [;]
- (ii) The amount, volume, and geographic extent of sales of goods or services offered under the mark[;]
- (iii) The extent of actual recognition of the mark[; and]
- (iv) Whether the mark was registered . . . on the principal register [with the Trademark Office].<sup>232</sup>

Because courts have not applied these factors with any degree of uniformity,<sup>233</sup> 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,<sup>234</sup> 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.<sup>235</sup> 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

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geared toward protecting consumers because diminution of a famous mark's ability to identify a product increases consumers' search costs." *Id.* at 1034–35. This uncertainty is part of the danger of dilution theory, which is designed to apply only under rare circumstances. *Id.* at 1042–43; Port, *supra* note 15, at 874–82 (describing dilution law in general and its unpredictability).

<sup>231</sup> Port, *supra* note 15, at 880–81. There does not exist a uniform standard for fame, but at least one scholar has advocated for a standard requiring "concrete proof of national fame through a proper consumer survey evidencing at least seventy percent of the general consuming public across the United States." Xuan-Thao Nguyen, *Fame Law: Requiring Proof of National Fame in Trademark Law*, 33 CARDOZO L. REV. 101, 122–23 (2011).

<sup>232</sup> 15 U.S.C. § 1125(c)(2)(A) (2012).

<sup>233</sup> See Nguyen, *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).

<sup>234</sup> *Dallas Cowboys Football Club, Ltd. v. Am.'s Team Prop., Inc.*, 616 F. Supp. 2d 622, 646 (N.D. Tex. 2009).

<sup>235</sup> *Nat'l. Pork Bd. v. Supreme Lobster & Seafood Co.*, 96 U.S.P.Q.2d 1479, 1498 (T.T.A.B. 2010). On the other hand, COACH, a trademark for high-end handbags and leather goods was held not famous. *Coach Servs., Inc. v. Triumph Learning LLC*, 96 U.S.P.Q.2d 1600, 1611–12 (T.T.A.B. 2010), *aff'd in part, vacated in part on other grounds*, 668 F.3d 1356 (Fed. Cir. 2012).

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.<sup>236</sup> While these were originally called “meme mark’ filings,” by Professor Beebe,<sup>237</sup> 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.<sup>238</sup> 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.<sup>239</sup> 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.<sup>240</sup> 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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<sup>236</sup> See Newcomb, *supra* note 6.

<sup>237</sup> Beebe, *supra* note 24, at 757.

<sup>238</sup> See Cotter, *Memes*, *supra* note 25, at 353.

<sup>239</sup> 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).

<sup>240</sup> See Newcomb, *supra* note 6.

designation as a trademark in commerce,<sup>241</sup> 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.<sup>242</sup> Upon receipt of an application, a Trademark Examiner at the USPTO assesses it to make sure all registration requirements have been met.<sup>243</sup> If the application meets the requirements, then “[n]o trademark . . . shall be refused registration” unless statutorily prohibited.<sup>244</sup> 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,<sup>245</sup> 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.<sup>246</sup>

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.”<sup>247</sup> 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.”<sup>248</sup> 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.<sup>249</sup> 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.<sup>250</sup> After praying with Jefferson, Beamer told her that

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<sup>241</sup> See 15 U.S.C. § 1051(a) (2012).

<sup>242</sup> See 15 U.S.C. § 1051(b). Even in this instance, an actual trademark *registration* will not issue until the applicant proves actual use. See 15 U.S.C. § 1051(d); Cohen, *supra* note 161, at 693.

<sup>243</sup> Beebe, *supra* note 24, at 758.

<sup>244</sup> See 15 U.S.C. § 1052.

<sup>245</sup> 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.”).

<sup>246</sup> 15 U.S.C.A. § 1057(c).

<sup>247</sup> 15 U.S.C. § 1052(a).

<sup>248</sup> *In re Eagle Crest Inc.*, 96 U.S.P.Q.2d 1227, 1229 (T.T.A.B. 2010) (citing *Reed v. Amoco Oil Co.*, 611 F. Supp. 9, 11 (M.D. Tenn. 1984)). The USPTO has used this rationale as one basis for rejecting a trademark application for OCCUPY WALL STREET. U.S. PAT. & TRADEMARK OFFICE, U.S. DEP’T OF COMMERCE, U.S. Trademark Application Serial No. 85/454,550 (filed on Oct. 24, 2011), FINAL REFUSAL (May 23, 2013).

<sup>249</sup> See ANTHONY SUMMERS & ROBYN SWAN, *THE ELEVENTH DAY: THE FULL STORY OF 9/11 AND OSAMA BIN LADEN* 58–65 (2012).

<sup>250</sup> *Id.* at 60.

he and some other passengers were going “to jump the guy with the bomb.”<sup>251</sup> Next, Jefferson heard the sounds of an “awful commotion.”<sup>252</sup> Then, “are you guys ready?” and Beamer yelling, “let’s roll!”—a phrase that he had often used to spur his children to action.<sup>253</sup> 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.’”<sup>254</sup> Less than five months after the phrase was used onboard United Airlines Flight 93, fourteen entities and individuals had applied to trademark the phrase,<sup>255</sup> including the Todd M. Beamer Memorial Foundation, Inc.,<sup>256</sup> 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.<sup>257</sup> Of the fourteen applications in the initial wave of filings, none are currently trademarks.<sup>258</sup>

## 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.<sup>259</sup> 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.<sup>260</sup> Within a month, the USPTO received

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<sup>251</sup> *Id.*

<sup>252</sup> *Id.* at 61.

<sup>253</sup> *Id.*

<sup>254</sup> *President Delivers State of the Union Address*, THE WHITE HOUSE (Jan. 29, 2002, 9:15 P.M.), <http://georgewbush-whitehouse.archives.gov/news/releases/2002/01/20020129-11.html>.

<sup>255</sup> 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\\_1\\_todd-m-beamer-foundation-trademark-lisa-beamer](http://articles.cnn.com/2002-02-02/us/beamer.trademark_1_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.*

<sup>256</sup> U.S. Trademark No. 2,691,610 (filed Feb. 25, 2003) (LET’S ROLL).

<sup>257</sup> See Matthew Diebel et al., *Iconic Figures from Sept. 11: Where Are They Now?*, MSNBC (Sept. 11, 2011), [http://www.msnbc.msn.com/id/44245075/ns/us\\_news-9\\_11\\_ten\\_years\\_later/t/iconic-figures-sept-where-are-they-now/#.UHI\\_bhhERdo](http://www.msnbc.msn.com/id/44245075/ns/us_news-9_11_ten_years_later/t/iconic-figures-sept-where-are-they-now/#.UHI_bhhERdo).

<sup>258</sup> See *Trademark Electronic Search System (TESS)*, U.S. PAT. & TRADEMARK OFFICE, <http://tmsearch.uspto.gov/> (last visited Aug. 31, 2013) (click “Basic Word Mark Search,” enter “Let’s Roll” as search term, select “The Exact Search Phrase” from “Result Must Contain” dropdown box, and click “Submit Query”).

<sup>259</sup> NAOMI KLEIN, *THE SHOCK DOCTRINE* 333 (2008); see also HARLAN K. ULLMAN ET AL., *SHOCK AND AWE: ACHIEVING RAPID DOMINANCE* 19–36 (1996).

<sup>260</sup> See MICHAEL R. GORDON & BERNARD E. TRAINOR, *COBRA II: THE INSIDE STORY OF THE INVASION AND OCCUPATION OF IRAQ* 35–37 (2006).

numerous applications for trademarks using the phrase “shock and awe.”<sup>261</sup> A fireworks company filed the first trademark application on March 20, 2003, the day the United States began bombing Baghdad.<sup>262</sup> Sony Corporation filed the second trademark application on March 21, 2003, for use as the title of a video game.<sup>263</sup> Sony later withdrew the mark amid intense criticism, describing the application as “an exercise of regrettable bad judgment.”<sup>264</sup> Today, most of the “Shock and Awe” applications have been abandoned.<sup>265</sup>

### 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.<sup>266</sup> Various SEAL teams operate under the group’s umbrella.<sup>267</sup> 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.”<sup>268</sup> 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).<sup>269</sup> Disney Enterprises filed three of those applications less than twenty-four hours after bin Laden’s death.<sup>270</sup> After a public outcry,<sup>271</sup> and public statements issued by the

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<sup>261</sup> Sabra Chartrand, *Patents; Before Shock and Awe Can Go from Battlefield to Lunchbox, There is a Stop at the Trademark Office*, N.Y. TIMES (Apr. 21, 2003), <http://www.nytimes.com/2003/04/21/business/patents-before-shock-awe-can-go-battlefield-lunch-box-there-stop-trademark.html> (noting applications for products including fireworks and “Shock and Awe Sauce”).

<sup>262</sup> U.S. Trademark No. 2,861,120 (filed Mar. 20, 2003) (SHOCK AND AWE). The application ultimately was accepted and registered as a trademark on July 6, 2004. *Id.*

<sup>263</sup> U.S. Trademark Application No. 78/228478 (filed Mar. 21, 2003) (SHOCK & AWE); *see also* Julian Day, *Sony to Cash in on Iraq with “Shock and Awe” Game*, THE GUARDIAN (Apr. 9, 2003), <http://www.guardian.co.uk/technology/2003/apr/10/games.Iraqandthemedias>.

<sup>264</sup> *Statement Concerning a Trademark Filing in US by [Sony’s] Game Affiliate*, SONY (Apr. 15, 2003), <http://www.sony.net/SonyInfo/News/ServiceArea/030415/index.html>.

<sup>265</sup> *See Trademark Electronic Search System (TESS)*, USPTO, <http://tmsearch.uspto.gov/> (last visited Aug. 31, 2013) (click “Basic Word Mark Search,” enter “Shock and Awe” as search term, select “The Exact Search Phrase” from “Result Must Contain” dropdown box, and click “Submit Query”).

<sup>266</sup> Michael P. Murphy, *Frequently Asked Questions*, U.S. NAVY, <http://www.navy.mil/moh/mpmurphy/pr.html> (last visited Aug. 31, 2013).

<sup>267</sup> *Id.* The acronym is derived from their capacity to operate at sea, in the air, and on land. *Id.*

<sup>268</sup> *See* Ashley Fantz, *Navy SEALs, the ‘Quiet Professionals,’ Got bin Laden*, CNN (May 3, 2011, 8:53 P.M.), <http://www.cnn.com/2011/US/05/03/binladen.seals/index.html>.

<sup>269</sup> *See Trademark Electronic Search System (TESS)*, USPTO, <http://tmsearch.uspto.gov/> (last visited July 21, 2013) (click “Basic Word Mark Search,” enter “Seal Team 6” as search term, select “The Exact Search Phrase” from “Result Must Contain” dropdown box, and click “Submit Query”).

<sup>270</sup> *See* U.S. Trademark Application No. 85,310,970 (filed May. 3, 2011) (noting use in entertainment and education services); U.S. Trademark Application No. 85,310,966 (filed May 3, 2011) (noting use with toys, sporting goods, electronic games, and Christmas decorations); U.S. Trademark Application No. 85,310,957 (filed May 3, 2011) (noting use with clothing, footwear, and headwear).

<sup>271</sup> Disney found itself being criticized in various mediums, including comedy television. Jon Stewart famously quipped, “putting a trademark on SEAL Team 6 is like copyrighting the guys who



U.S. Navy,<sup>272</sup> Disney expressly abandoned its two applications “out of deference to the Navy.”<sup>273</sup> All of the other applications were also abandoned either through express declarations or failure to respond to certain USPTO requests.<sup>274</sup>

#### 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.<sup>275</sup> The story went viral soon after the national media began covering it on March 8, 2012.<sup>276</sup> 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.<sup>277</sup> Roughly three weeks after her son’s death, Martin’s mother, Sybrina Fulton, filed two trademark applications for the phrases I AM TRAYVON<sup>278</sup> and JUSTICE FOR TRAYVON.<sup>279</sup> Three other

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stormed the beaches of Normandy, or the Statue of Liberty, or putting a patent on [George S.] Patton . . . . It belongs to all of us!” Jon Stewart, *The Daily Show* (Comedy Central television broadcast, May 16, 2011), available at <http://www.thedailyshow.com/watch/mon-may-16-2011/well-that-was-fast---comcast-nbc-merger>.

<sup>272</sup> Ethan Smith & Julian E. Barnes, *Walt Disney Surrenders to Navy’s SEAL Team 6*, 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).

<sup>273</sup> *Id.*

<sup>274</sup> See TESS search results, *supra* note 269.

<sup>275</sup> Campbell Robertson & John Schwartz, *Shooting Focuses Attention on a Program That Seeks to Avoid Guns*, N.Y. TIMES, Mar. 23, 2012, at A12, available at [http://www.nytimes.com/2012/03/23/us/trayvon-martin-death-spotlights-neighborhood-watch-groups.html?pagewanted=all&\\_r=0](http://www.nytimes.com/2012/03/23/us/trayvon-martin-death-spotlights-neighborhood-watch-groups.html?pagewanted=all&_r=0).

<sup>276</sup> See Brian Stelter, *In Florida Shooting Case, a Circuitous Route to National Attention*, N.Y. TIMES, Mar. 26, 2012, at B1, available at <http://www.nytimes.com/2012/03/26/business/media/for-martins-case-a-long-route-to-national-attention.html>. After the story was broadcast by local affiliates on the night of the shooting, the first national reports came on March 8, 2012, from CBS News, The Huffington Post and NBC News website The Grio. *Id.* By the end of the week, CNN, Headline News, and other black radio hosts and bloggers also covered the story. *Id.* According to the Pew Research Center, the controversy over Martin’s shooting was the American public’s top story for at least five straight weeks following the first days of coverage. See Pew Research Ctr. for the People & the Press, *News about Trayvon Martin Case Still Top Story* (Apr. 24, 2012), <http://www.people-press.org/files/legacy-pdf/04-24-2012%20NII%20final.pdf>.

<sup>277</sup> See, e.g., Robertson, *supra* note 275; Richard Fausset, *Trayvon Martin T-shirts: American Outrage, Size XXL*, L.A. TIMES (Apr. 2, 2012), <http://articles.latimes.com/2012/apr/02/nation/la-nann-trayvon-t-shirt-roundup-20120402> (“The Trayvon Martin protest T-shirt has become a staple at rallies across the country . . . . [Some t-shirts] . . . simply proclaim, ‘I am Trayvon.’”).

<sup>278</sup> U.S. Trademark Application No. 85,575,974 (filed Mar. 21, 2012) (I AM TRAYVON).

<sup>279</sup> 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.<sup>280</sup> 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.<sup>281</sup> 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.<sup>282</sup>

### *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.<sup>283</sup> 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.<sup>284</sup> 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

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<sup>280</sup> See U.S. Trademark Application No. 85,578,962 (filed Mar. 23, 2012) (JUSTICE 4 TRAYVON); U.S. Trademark Application No. 85,596,507 (filed Apr. 12, 2012) (I AM NOT TRAYVON MARTIN); U.S. Trademark Application No. 85,581,109 (filed Mar. 27, 2012) (IF I HAD A SON, HE'D LOOK LIKE TRAYVON).

<sup>281</sup> See *Why is Trayvon Martin's Mother Trademarking His Name?*, THE WEEK (Mar. 28, 2012), <http://theweek.com/article/index/226172/why-is-trayvon-martins-mother-trademarking-his-name>; Elie Mystal & Christopher Danzig, *Trayvon Trademark? An ATL Debate*, ABOVETHELAW.COM (Mar. 29, 2012, 5:51 PM), <http://abovethelaw.com/2012/03/trayvon-trademark-an-atl-debate>; Lisa M. Ruth, *Trayvon Martin: the Marketing of the Victim*, WASH. TIMES CMTYS. (Mar. 30, 2012), <http://communities.washingtontimes.com/neighborhood/life-lisa/2012/mar/30/trayvon-martin-marketing-victim/>.

<sup>282</sup> See *supra* notes 278–279 (indicating publication for opposition).

<sup>283</sup> 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.*

<sup>284</sup> 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.<sup>285</sup> What is more, the potential for over-enforcement of trademarks is high for viral meme marks.<sup>286</sup>

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.<sup>287</sup> 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.<sup>288</sup> 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 temporally 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.<sup>289</sup> 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.

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<sup>285</sup> See, e.g., Dylan Stableford, *What Happened to All of the Trayvon Martin Hoodies on Cafe Press?*, YAHOO! NEWS (Mar. 30, 2012), <http://news.yahoo.com/blogs/sideshow/happened-trayvon-martin-hoodies-cafe-press-144936770.html>.

<sup>286</sup> See Leah C. Grinvald, *Shaming Trademark Bullies*, 2011 WIS. L. REV. 625, 641 (2011) (discussing “trademark bullies” outside of the memetic context); K.J. Greene, *Abusive Trademark Litigation and the Incredible Shrinking Confusion Doctrine—Trademark Abuse in the Context of Entertainment Media and Cyberspace*, 27 HARV. J.L. & PUB. POL’Y 609, 631 (2004).

<sup>287</sup> See Cotter, *Memes*, *supra* note 25, at 401 (noting that, with respect to copyright law, “[s]pecific evolutionary impacts are impossible to predict, and even likely evolutionary directions . . . can only be assessed in a probabilistic fashion”).

<sup>288</sup> A similar argument could also be made with respect to the “family of marks” doctrine.

<sup>289</sup> Issues still remain. For example, do viral meme marks develop “good tricks,” as earlier posited? Are these marks smaller components of larger memplexes? 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.