

**ARE WE BUYERS OR HOSTS?  
A MEMETIC APPROACH TO THE FIRST AMENDMENT**

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Are We Buyers or Hosts?  
A Memetic Approach to the First Amendment<sup>1</sup>  
by Jeffrey E. Stake on January 23, 2001

Laura: "Would you please stop singing that song?"

Alison: "I want to, but I can't get it out of my head."

Laura, a minute later: "Oh no! You gave it to me."

Alison: "Well, don't blame me; you gave it to me in the first place."

Are my daughters crazy? They think that a simple song can repeat itself in their heads against their wills. They talk about an idea, in this case a musical, lyrical idea, as if it is something beyond the control of the mind. I do not think my children are crazy. They are onto something important, and it is something not fully recognized by the United States Supreme Court. My daughters know that ideas are not inert; they have the power to replicate despite the efforts of humans to control them. Richard Dawkins developed this point, coining the term "meme" referring to ideas (or bits of information) that replicate.<sup>2</sup> Dawkins's comparison of ideas to genes suggests that ideas have an existence of their own, separate from the lives of their carriers.<sup>3</sup> Although some are lazy, not all ideas wait passively for us to choose to express them. The aggressive, over-achieving ones find a way to elbow themselves into our conversation and sometimes even manage to monopolize it. Ideas have a way of constructing their own environment using us for both their raw materials and labor force.

Despite the fact that ideas do not sit passively<sup>4</sup> like products in an ordinary market, our First Amendment jurisprudence is built on a "marketplace" metaphor. That metaphor

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<sup>1</sup> For their thoughtful comments, I thank Fred Aman, Kevin Brown, Dan Conkle, Kenneth Dau-Schmidt, Terry Denny, Robert Fischman, Nicholas Georgakopoulos, Oliver Goodenough, Cheryl Hanna, Joseph Hoffmann, John Humbach, Steve Johnson, Val Nolan, Judge Richard Posner, Harry Pratter, Eric Rasmusen, John Scanlan, Warren F. Schwartz, Robert Stake, Janet Stake, Susan Williams, Gene Shreve, and William Naugle. I am especially indebted to Steven Goldberg and Owen Jones for cautionary warnings and Robert Frank for encouragement. I thank the Gruter Institute for inviting me to present this idea at its annual conference in 1997 and to the Law and Society Association for the friendly but skeptical welcome LAS members gave this paper at the annual meeting in 1996, as were my Indiana colleagues at a faculty workshop October 19, 1994.

<sup>2</sup> Dawkins coined the term *meme* to sound like *gene*. Memes are relatively small ideas that are often found grouped together in meme-complexes in somewhat the same way that genes are often found grouped together in gene complexes. This article uses the term *ideas* in a way that includes both memes and meme-complexes. Dawkins used the term *memic* instead of *memetic*.

<sup>3</sup> The idea that ideas have true agency, rather than just metaphoric agency, dates back at least to Hegel.

<sup>4</sup> [Do we have a verb that means to do absolutely nothing? Quiesce?]

leads to the comfortable conclusion that the best ideas will survive and ideas not useful to humans will die off. Although this "marketplace of ideas" model has suffered much criticism,<sup>5</sup> it will likely persist as a normative framework for analyzing First Amendment issues until we find a better model.<sup>6</sup> Before we can shelve the marketplace metaphor, we need another way to think about ideas. One purpose of this Article is to show that the new science of memetics offers us an alternative to the marketplace metaphor.

The memetic perspective differs deeply from the traditional marketplace viewpoint. Embedded in the usual view is the notion that ideas are essentially our creations; man is the creator, looking down from above on his ideas and they remain within our control. The memetic perspective suggests that ideas arise from below. They develop and grow, building on themselves, evolving. They grow within a culture, our culture, but they develop far beyond the human control implicit in the marketplace metaphor. Just as we cannot expect nature or the economy to be one harmonious whole,<sup>7</sup> because they are not designed from above we cannot expect ideas to live in harmony with themselves or with us. Recognizing memes as ideas with the power to replicate thus immediately suggests the critical distinction between the interests of ideas and the interests of people. The goal identified by Darwinian analysis is to prevent memes from using harm and threats of harm to human vessels as a tactic to compete with other ideas. Thus, an evolutionary approach to ideas may help us build a foundation for a person-centered jurisprudence of free speech. And beyond that, by exploring memetics, I also hope to show, more broadly, how an evolutionary perspective can be useful in both positive and normative analysis of law.

Shifting from theory to practical application, another goal of this Article is to devise a formulation of our Constitution's protection of speech that would allow states punish some truly harmful speech. Consider the idea expressed in the so called Nuremberg Files® web site. That site suggested that Supreme Court Justice O'Connor should be killed for supporting abortion rights. Because it could increase the chances that Justices will be murdered or maimed, it ought to be outlawed.<sup>8</sup> On the other hand, outlawing harmful speech also carries obvious costs. As the Supreme Court has said, "[t]he vitality of civil and political institutions in our society depends on free discussion."<sup>9</sup> Opportunities for free speech are highly prized goods, valued for the

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<sup>5</sup> See, e.g., *Mari Matsuda*, 87 Mich L R 2320. See also 71 Chi Kent 863.

<sup>6</sup> See Thomas Kuhn, *The Structure of Scientific Revolutions*.

<sup>7</sup> Matt Ridley has said about economics and biology, "At the root of both disciplines lies the notion that, if the balance of nature was not designed from above but emerged from below, then there is no reason to think it will prove to be a harmonious whole." Matt Ridley, *The Origins of Virtue* (1998) at 252.

<sup>8</sup> A formulation of the First Amendment that would allow such speech to be outlawed is presented and discussed below.

<sup>9</sup> *Terminiello v. Chicago*, 337 U.S. 1, 4 (1948).

benefits they generate for both speaker and audience, valued as a means to foster democracy and as a check on the abuse of political power, and valued as essential steps in the pursuit of truth.<sup>10</sup> As John Stuart Mill said, "[I]f any opinion is compelled to silence, that opinion for aught we can certainly know, be true."<sup>11</sup> Thus, there are obvious dangers in suppressing speech. Our goal should be to strike a balance that optimally reduces both dangers.

If we were to maximize human welfare, we would outlaw speech when it does more harm than good. But identifying such speech is difficult, orders of magnitude harder than determining how best to promote safety on public highways. Not only is information scarce, we cannot trust the decision makers to ignore their self-interest and promote only the public weal. Governmental balancing of policy concerns in the free-speech arena is especially problematic because unconstrained lawmakers could apply their power to regulate speech to the end of keeping themselves in power rather than promoting the public interest. If the Mayor uses the power of City government to improve the roads to his private home, the public can unelect him. But when lawmakers outlaw political speech to protect themselves from recall, they eliminate a critical link in the feedback mechanism we rely on for correcting governmental errors. If elected officials were completely free to decide which speech falls on the harmful side of the balance, they would have both the incentive and opportunity to penalize ideas that conflict with their own. Their self-serving regulations on speech might well not be rectified through the political process. Arguments to the effect that the ruling party is destroying the economy or our community need protection from the wrath of the ruling party.

Legislators, acting in the gravity of self interest, can be expected to slide down the slippery slope to a point where too much speech is punished. Since we can expect the decision makers to outlaw too much political speech, a constitutional constraint will push them back toward the optimum. Of course it is hard to say where that optimum lies and we cannot know for sure when the constitution has pushed enough. But it seems likely that the marketplace metaphor pushes legislatures back too far. The First Amendment as now read protects some speech that generates far more harm than good. Indeed, the current reading of the First Amendment threatens freedom of speech.

Within the evolving system of ideas floating though any population there exist a number of feedback loops. One of those feedback loops is the familiar one just

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<sup>10</sup> "[T]hough all the winds of doctrine were let loose to play upon the earth, so truth be in the field, we do injuriously, by licensing and prohibiting, to misdoubt her strength. Let her and falsehood grapple; whoever knew truth put to the worse in a free and open encounter?" John Milton, *Areopagitica, A Speech for the Liberty of Unlicensed Printing to the Parliament of England* (1644). But there is the rub. How can we assure free and open encounters? For discussion of whether free speech leads to truth, see e.g., Frederick Shauer, *Free Speech: A Philosophical Enquiry* 15-35 (1982); Stanley Ingber, *The Marketplace of Ideas, A Legitimizing Myth*, 1984 *Duke L. J.* 1 (1984);

<sup>11</sup> *On Liberty*, ch. II. (1859).

mentioned. Legislators (and other elected officials), furthering their own ideas, propose various ways of passing and enforcing laws and spending public funds. Some people hear of the proposals and some of those listeners complain if the ideas embodied in the proposals are objectionable. When the ideas are too far from the mainstream, the legislators often hear enough complaints to change their positions. When they do not change position on an important issue, the voters can replace them with someone whose ideas are more compatible with popular ideas. We rightly fear that legislators will keep themselves in power by passing laws that silence those who speak out against the legislators' ideas. The First Amendment is designed to prevent politicians from thus cutting off the democratic feedback loop that corrects their own bad ideas.

There is another, equally important, feedback loop. While ideas circulate within the electorate, they are voiced by members of the electorate. While voters respond to politicians with both their voices and votes, they can respond to other voters only with their voices. Those knowing the truth frequently respond to those who speak falsehoods, just as Mill assumes. In some ways, however, this popular feedback loop is more fragile than the legislative feedback loop because the ballot box is protected from scrutiny whereas public speech is, by its very nature, open to public scrutiny and reaction. Exploiting this weakness, some special meme-complexes cut off the non-political feedback loop by silencing their opposition. At present, the First Amendment protects these ideas, thus jeopardizing our freedom to speak. The practical goal of this Article is to refine our First Amendment jurisprudence in a way that gives lawmakers the power to punish this latter sort of speech, speech which cuts off the non-political feedback loop, without giving them the power to cut off the democratic feedback loop so rightly prized by traditional defenders of the free speech.<sup>12</sup>

The Article will unfold as follows. The first task is to develop the notion that some ideas have the ability to replicate. An easy example is the 1999 computer worm, *AMelissa*,<sup>13</sup> which replicated perhaps faster than any earthly idea ever, at least until the *ALove Bug* came along.<sup>13</sup> Ideas can also reproduce in human brains. I attempt to catalog some of the ways ideas get people to pass them on. On this point, I am not merely suggesting a new metaphor for ideas, that they behave *Alike* replicators. Ideas are themselves replicators. And it is their power of replication that creates the danger. It is not just people that are the problem. Focusing on people as the actors fails to convey the essential point that ideas are not wholly within the control of people.

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<sup>12</sup> I understand that there is an argument that the slippery slope in interpreting the First Amendment is so slippery that we will slide down it into the depths of too much governmental suppression of speech unless we carve only the clearest and simplest of exceptions. First, I do not buy that argument because courts, not the people and their legislators, will flesh out the contours of any exception and they can handle subtleties. Second, I hope to propose an exception that is not so subtle that it is beyond lay understanding.

<sup>13</sup> See Lev Grossman, *Attack of the Love Bug*, *Time*, May 15, 2000, page 49, 50. In the wake of viruses, a new form of meme, the virus hoax has become popular. Virus hoaxes use the power of our fear of viruses to spread themselves. Some computer software companies have virus hoax centers for maintaining information on hoaxes.

After that admittedly difficult first step, the ability to replicate, the next step is a small one. Some replicators in the world of ideas are not going to make life better for people. We would be better off if those ideas did not exist, or were not allowed to replicate. I identify some types of ideas that present a potential danger to people and explain why bad speech cannot be counteracted with good speech. Next, I define some of the dangerous ideas that legislatures could curb without undermining the democratic political process. I suggest that the constitution should be read to allow states to punish speech that advocates physical injury to speakers of opposing ideas. After proposing that radical exception to First Amendment protection of political ideas, the Article examines some applications of the proposed exception to specific behaviors, including anti-abortion speech and hate crimes. It will be admitted that much speech that does more harm than good would still be protected by the First Amendment. Finally, I argue that my proposed exception, although only a narrow modification of the current law, could make a life-saving difference.

This Article, one of the first to apply memetics to legal issues,<sup>14</sup> fits within a larger emerging effort to apply the tools and perspective of evolutionary science to problems in law.<sup>15</sup> The emerging discipline has at least two major strands. One

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<sup>14</sup> Despite the fact that numerous books and articles have developed the idea of memes, see e.g. J.M. Balkin, *Cultural Software*; Daniel Dennett, *Darwin's Dangerous Idea*; Aaron Lynch, *Thought Contagion* (1997); Susan Blackmore, *The Meme Machine*; few law review articles focused on memes before the turn of the millennium. For one such, see Michael Fried, *The Evolution of Legal Concepts: The Memetic Perspective*, 39 *Jurimetrics* 291 (Spring 1999).

<sup>15</sup> Some of the academics interested in this effort formed an organization, The Society for Evolutionary Analysis in Law (SEAL), in early 1998. For a competing description of Law and Biology, see E. Donald Elliot, *Law and Biology: A New Synthesis*, 41 *Saint Louis Law Journal* 595 (1997). For a wide ranging discussion, see the Symposium issue on Law, Human Behavior and Evolution in Volume 8 of the *Journal of Contemporary Legal Issues* (1997), and for applications of evolutionary analysis to criminal law, see Symposium: *Biology, Behavior, & the Criminal Law*, 22 *Vermont L. Rev.* (1997). See also William H. Rogers, *Where Environmental Law and Biology Meet: Of Panda's Thumbs, Statutory Sleepers, and Effective Law*, 65 *Colo. L. Rev.* 25 (1993).

subgroup attempts to use what evolutionary science knows about humans to improve understanding and prediction of human behavior in response to varying legal rules.<sup>16</sup> Another subgroup attempts to apply evolutionary analysis not to humans, but to the law itself; this group sees law as an evolving entity potentially subject to the same forces that affect the evolution of other entities.<sup>17</sup> The present project fits between the two camps in that the unit of evolutionary analysis is not humans or the law, but ideas in general. Its central assumption is that knowing more about how ideas evolve could help us to frame better laws regarding speech. In its focus on ideas as the unit of evolution, it shares with the first branch a hope that the law can be made a better instrument for social good, and it shares with the second, perhaps loftier, branch a belief that the methods of evolutionary analysis can help us understand the development of the law and other ideas just as they help us understand carbon-based life forms.

We can usefully compare law and economics to law and evolutionary science. The economic model starts with selfish behavior of people. Evolution science starts similarly, but with a different unit of selection. Biology starts with the selfish gene, rather than the selfish individual. This focus on the gene and its propagation extends the life of the organism indefinitely, making it easy to see why one individual would sacrifice herself for another, a behavior that is harder to explain when starting with a selfish individual. In addition, the evolutionary perspective helps to understand preferences; preferences need no longer be taken as given.

However, in many ways the economic and biological perspectives overlap, what is good for the individual is often good for her genes. For that reason, a researcher applying the evolutionary approach would often make the same predictions and prescriptions as would be made by someone taking the economic approach. To the extent of the overlap, we cannot expect law and biology to make the same kind of impact as economics did in

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<sup>16</sup> Appeals to genetic science have in the not so distant past been employed to justify some of the most horrible crimes against people this world has ever known. See Stephan Chorover, *From Genesis to Genocide* (tracing the frightening misuse of biology in recent times). The policy implications of genetics cannot be discussed without calling to mind eugenics and the unfathomable suffering it caused. As Jonathan Weiner puts it in *Time, Love, and Memory*, at 94, "the study of genes and behavior defines the depth as well as the height of the twentieth century, because it traveled in both directions, like angels ascending and descending Jacob's ladder. The gas chambers of the Holocaust were built on Galton's principles." We ought not forget, however, that evolution was not the first form of science deployed by racists. See Steven J. Gould, *The Mismeasure of Man* 43 (1981) (describing the great Swiss naturalist, Louis Agassiz, as a leading spokesman for polygyny).

Rather than looking to establish differences between people, evolutionary psychologists seek to describe the psychic unity of mankind. See Barkow, Cosmides, and Tooby, *The Adapted Mind*, 79 (1992). Working on that foundation, the goal of evolutionary legal scholars is to explore the legal implications of our universally shared architecture. The point of this Article is to develop both a theory and practical approach for immunizing our culture against the kinds of ideas that have in the past led to the racist-inspired killing of humans. My whole point is to argue against "survival of the fittest" as a normative touchstone.

<sup>17</sup> So far, the research has focused on the application of chaos theory. It can be hoped that, at some point, these researchers will address some of the claims made by law and economics about the evolution of the law toward efficiency. See Priest, and subsequent Articles.

the early days of law and economics. Law and biology is simply not different enough from law and economics in its central paradigm to have that kind of impact. Nevertheless, the biological perspective can often fine-tune the economic analysis and occasionally lead to dramatically different conclusions.

This Article pushes the evolutionary approach beyond the selfish human of economics and beyond the selfish gene of biology to the selfish meme. It is hoped that the evolutionary approach will, in this instance, offer a dramatically different perspective from the economic approach. Whereas the marketplace metaphor carries with it a sense of consumer sovereignty, the biological perspective makes clear that we should expect competition between information encoded in DNA and information encoded in books.

### The nature of ideas

For purposes of this Article, an idea is a set of connections that could exist in a person's brain and could be recognized as an idea by that brain. An idea can range from a fashion to a philosophy. It could be the thought expressed in a single word, a phrase, a sentence, or a series of sentences, all the way up to a collection of thoughts large enough to be called a religion or "the law." For a thing to be an idea, it must be possible for the thing to reside in our heads, but it need not be expressed or even expressible in the words available in human languages.<sup>18</sup> Nor need the idea be contained in any brain. An idea can be written down, entirely forgotten, and I take no strong position on whether an idea needs to have once resided in a brain. Suppose that Einstein happened to look down at children playing with blocks and saw " $E = MC^2$ " lying on the floor, which triggered a *big* idea. Did that idea exist in the blocks before he saw them? I would say no, but I am not sure that it matters.

Here Dawkins might make a distinction between ideas and memes. For him, memes exist in brains.<sup>19</sup> The expression of a meme, on paper or in action, is the phenotype of the meme, but it is not the meme. I prefer to view the meme as being able to exist outside outside of our brains. One criterion for distinguishing phenotypes from genotypes is that the mutilation of a phenotype is not replicated whereas a change to a gene is replicated.<sup>20</sup> Cutting the tails off rats does not lead to offspring without tails, whereas altering a gene in a sperm or egg could lead to infinite generations without tails. On this criterion, however, it would seem that a meme can exist on the piece of paper. As I type, I create replications of my ideas in the memory of the computer. I also err, often,

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<sup>18</sup> If Steven Pinker is right, we think in mentalese, not in a language. Steven Pinker, *The Language Instinct* 56-57 (1994). Albert Einstein said, "These thoughts did not come in any verbal formulation. I rarely think in words at all. A thought comes, and I may try to express it in words afterward." in H. Eves, *Mathematical Circles Adieu* (Boston: Prindle, Weber and Schmidt, 1977).

<sup>19</sup> Dawkins, *The Extended Phenotype*, at 109.

<sup>20</sup> Dawkins, *The Extended Phenotype*, at 99.

in my typing. Nearly all of these errors are non-sense, but an occasional one is a slight improvement on the meme in my head. From then on, it is the typographic mutation instead of the original meme that reproduces. Since unintentional changes to the paper can subsequently reproduce, it would seem that the words on the paper are the meme rather than merely a phenotype of the meme.

I do not think it critical at this juncture to define whether an idea can reside in locations other than brains, as in books or on magnetic hard disks. Nor need we settle whether it might exist as a set of simultaneous or sequential electro-chemo-mechanical connections in the head of some nonhuman animal with a nervous system. Fortunately, for the analysis here, having a precise definition of "idea" is not essential. In *The Selfish Gene*, Richard Dawkins demonstrates the power of the concept of genetic evolution without describing precisely how much genetic material it takes to make a "gene."<sup>21</sup> Similarly, as he notes,<sup>21</sup> we can share some useful and entertaining thoughts without nailing down the definition of a "meme."

Ideas are like viruses and bacteria in some ways. When an idea takes the form of a computer virus, it has the power to make copies of itself, spreading from one computer to another without the help of any human being, in some cases even circumventing the efforts to keep it from propagating. Like a bacterium, it draws on the resources around it and uses them to make a copy of itself. Just as a human body is a gene's way of making another gene,<sup>22</sup> a computer hard disk is a meme's way of making another meme. But most ideas are much more dependent on living hosts than computer viruses are. Like biological viruses, they rely directly on outside organisms for their replication. A funny joke that I cannot resist retelling employs me as a vessel for its reproduction. An idea about free speech in my head may be reproduced by my writing it down for you to read. I supply all of the material and calories for its new expression. It supplies only the intellectual content. Unlike most viruses, but like many bacteria, memes can be good for people. Like bacteria and viruses, an idea may be active or dormant.

Between memes and genes, the meme is actually the larger concept. After all, genes are information chemically encoded on a double helix. The genome in each of my cells contains the idea of a human being. Thus genes are memes of a particular kind, a kind that does its replicating only in somewhat fragile, carbon-based vessels. Despite the fact that genes could be considered a sort of meme, I will continue to use the term "meme" to refer to reproducing ideas other than those embodied in DNA.

There is some historical irony in trying to use genes to explain memes. When Seymore Benzer was creating his path-breaking mapping of the rII gene in the 1950's, he had a hard time explaining what he was doing. To make it understandable, he analogized

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<sup>21</sup> Dawkins, *The Selfish Gene*, chapter 11.

<sup>22</sup> Jonathan Weiner attributes the following to Samuel Butler: A hen is only an egg's way of making another egg.<sup>22</sup> *Time, Love, Memory* (1999) at 129.

to typographical errors. He identified five different sorts of error, substitutions (AAttila and his Nuns@), deletions (AI can speak just as good nglish as you@), insertions (AI have no fears that Mr. Khrushchev can contaminate the American people. We can take in stride the best brain washington he can offer@), inversions (upsidedown type), and nonsense.<sup>23</sup> Of course memes can mutate by intentional action as well as, indeed better than, by error. In the >50's, mutation of genes was a mystery. Today the public is more familiar with the idea of genetic mutation than memetic mutation.

### Natural selection

The key ingredients for Darwinian evolution by natural selection are reproduction and variation.<sup>24</sup> Reproduction, or replication, or copying, implies some fidelity to the original, and therefore implies "inheritance" of some of the characteristics of the original. The other essential requirement is variation; the reproduction must be imperfect in some instances so that there are differences within the population of replicators. Reproduction requires fidelity to the original and variation requires infidelity. Variation is what allows evolution to reach new locations in the conceptual space of all possible designs.<sup>25</sup> Once there is reproduction with variation, there are differences in the pool of reproducing organisms. When there are differences, some of those differences will matter when it comes to further reproduction. Differences like a greater ability to protect one's own copies from harm will enhance replication. Other differences, such as those leading to sterility or premature death, will impede replication. Thus variation will lead to differential reproduction. By necessity, differences in rates of reproduction will lead to differences in relative population. The better replicators will tend to be more populous than the poorer replicators.

We ordinarily think of Darwinian evolution in the context of biological development. The genes present in one generation differ from those in the previous generation in a couple of ways. One difference is in relative frequency. Because of sexual selection, natural selection, and artificial selection, some genes are more common and others less common than in the previous generation. Another difference is that there are

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<sup>23</sup> Jonathan Weiner, *Time, Love, and Memory*, 1999 at 57.

<sup>24</sup> Darwin, quoted in *The Adapted Mind* at 50. Death is probably an important ingredient as well. Evolution can occur without death, but natural selection implies that some things survive and some become extinct. However, Adifferential reproduction (and not survival *per se*) is the engine that drives natural selection. @Leda Cosmides and John Tooby, *Evolutionary Psychology: A Primer*, <http://www.psych.ucsb.edu/research/cep/primer.html> just before principle 3. According to Robert Trivers, Natural selection is the result of any system that combines heredity, variation, and differential reproduction. Robert Trivers, *Social Evolution* 28-29 (1985). [check this last cite] Reproduction is obviously implied by heredity.

<sup>25</sup> The design space of ideas is simply the set of all possible ideas thought of as forming a multidimensional space in which closely related ideas sit next to each other. For an elaborate development of this idea, see Daniel C. Dennett, *Darwin's Dangerous Idea*.

new genes that did not exist in the previous generation. For various reasons of physics and chemistry, copies are not always exactly the same as the original gene, they are mutations. For most of earth's biological history, genes changed by random accidents, but with genetic engineering we have introduced new means for genes to change. We have developed the ability to modify genes in somewhat predictable ways.

Ideas too can evolve by natural selection. Both key requirements are met. First, ideas can reproduce. One interesting example is the idea embodied in a letter, called the Saint Jude letter, received by both my colleague, Oliver Goodenough, and me. These letters are reproduced (yet again) below.

#### Letter received by Jeff Stake

Kiss someone you love  
Kiss someone you love when you  
get this letter & make magic.  
With love all things are possible.

This paper has been sent to you for  
Good Luck. The original is in New  
England. It has been around the  
world nine times.

The luck has been sent to you.  
You will receive good luck within  
four days of receiving this letter &  
you must, in turn, send luck.  
This is no joke.

Send no money. Send copies to  
people you think need luck.  
Don't send money as fate has no  
price.  
Do not keep this letter, it must  
leave your hands within 96 hours.  
A Pan Am Officer received  
\$170,000.00. Joe Elliot received  
\$70,000.00 & lost it because he  
broke the chain while in the  
Philippines.  
Cane Walsh lost his wife 6 days

#### Letter received by Oliver Goodenough

With Love All Things are Possible.  
This paper has been sent to you for  
Luck. The original is in New  
England. It has been sent around  
the world.

The Luck has been sent to you.  
You will receive good luck within  
4 days of receiving this letter  
pending in turn you send it on.  
This is no joke. You will receive  
good luck in the mail.

Send no money. Send copies to  
people you think need good luck.  
Do not send money cause faith has  
no price.  
Do not keep this letter. It must  
leave your hands within 96 hrs.

An A.R.P. officer Joe Elliot  
received \$40,000,000.

George Welch lost his wife 5 days  
after this letter. He failed to

after receiving this letter. He failed to circulate the letter. However, before her death he received \$7,775.00. Please send 20 copies & see what happens within 4 days.

The chain comes from Venezuela & was written by Saul Manthony Degrong, a missionary from South America.

Since the copy must tour the world, you must make 20 copies & send them to friends & associates. After a few days you will get a surprise.

This is true. Even if not superstitious, do note the following: Constantine Dais received the chain in 1963. He asked his secretary to make 20 copies & send them out. A few days later he won the lottery of \$62,000,000.00.

Carlos Baddit, an office employee, received the letter & forgetting it had to leave his hands in 96 hours, lost his job.

Delan Fairchild received the chain & not believing, threw it away. Nine days later he died. In 1987, the letter was received by a young woman in California. It was faded & barely readable. She promised that she would retype the letter & send it out, but she put it aside. She was plagued with various problems. The letter did not leave her hands in 96 hours. She finally typed the letter as promised and got

circulate the letter. However before her death he received \$7,775,000. Please send copies and see what happens after 4 days.

The chain comes from Venezuela and was written by Saul Anthony Degnas, a missionary from S. America.

Since that copy must tour the World. You must make 20 copies and send them to friends and associates after a few days you will get a surprise.

This is love even if you are not superstitious. Do note the following: Contonare Dias received this letter in 1903. He asked his Sec'y. to make copies and send them out. A few days later he won a lottery of 20 million dollars.

Carl Dobbitt, an office employee received the letter + forgot it had to leave his hands within 96 hrs. He lost his job. After finding the letter again he made copies and mailed 20 copies. A few days later he got a better job.

Dolan Fairchild received the letter and not believing he threw it away. 9 days later he died. In 1987 the letter was received by a young woman in Calif. It was faded and hardly readable. She promised her self she would retype the letter and send it on but, she put it aside to do later. She was plagued with various problems, including expensive car problems. This letter did not leave her hands in 96 hrs.

a new car.

aint Jude

Send no money. Do not ignore this letter. It works.

She finally typed the letter as promised and got a new car. Remember send no money. Do not ignor this C it works.

St. Jude

It is easy to see that some memetic reproduction has occurred here.<sup>26</sup> The letters are so similar that it seems highly improbable that they derive from independent sources. This idea has been replicating for many years, for decades according to the Post Office.<sup>27</sup> That some ideas reproduce does not mean that all do. Many ideas do not have that power. They exist in the mind as mentalese<sup>28</sup> but they cannot get out because they do not include a mechanism for translation into the modes of expression we use for transmission or replication. Dawkins would probably not call these "memes" as they cannot be transmitted to a new host. However, given a new environment, a brain with language up to the task, these ideas might replicate.

Memetic replication implies two possibilities. First, that it is possible for ideas to be broadcast unintentionally. This is easily seen from the example of the idea that it is effective to use a club to beat on the head of one's enemies. Clearly, the club inventor would rather keep his enemies in the dark; he does not want them to get the idea he has in his head. But the inventor's very use of the club will transmit the idea to his enemies that they might use a club on him.

Second, memetic reproduction implies that ideas can be received unintentionally. They can re-form in a new host against his will. This is evidenced by the opening example of my daughters being infected by a song that they do not want in their heads. Songs are excellent examples of this involuntary reception, as is shown by their extensive use in advertising. I did not want the idea in my head that a Chevrolet pickup truck is built ALike A Rock@ and I certainly did not want that Bob Seger song, which I once liked, to conjure up visions of General Motors products. But, notwithstanding my desires, that is the result. I am also not fond of the idea that AWhite Men Can't Jump.@ Nonetheless, it was transmitted to me and it, along with other prejudices, sits in my head against my will.

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<sup>26</sup> For a theoretical model of three modes of meme transmission, See Oliver Goodenough, Information Replication in Culture, Three Modes for the Transmission of Culture Elements Through Observed Action, pages 9-11 (describing uncoded, partially coded, and fully coded transmission).

<sup>27</sup> See Oliver's article in Science.

<sup>28</sup> Steven Pinker uses the word "mentalese" to refer to the nonlanguage in which people think. Steven Pinker, The Language Instinct (1994).

Thus both unintentional transmission and reception are possible. Reproduction can occur without any human wanting it to.<sup>29</sup>

As ideas are reproduced, they change, there is variation. As the children's game of "telephone" shows and as false rumors confirm, ideas, like genes, can mutate by a failure to be copied exactly.<sup>30</sup> The effects of saying something are not always predictable.

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<sup>29</sup> Perhaps because memes can reproduce without humans intending them to reproduce, Dawkins says that *Amemes should be regarded as living structures, not just metaphorically but technically.*<sup>@</sup> I and perhaps many others would agree that some ideas are alive. However, I assume for this Article only that some ideas have the power (though they lack the intention) to replicate against the wishes of humans. We can discuss the implications for the First Amendment without deciding whether ideas can be living structures.

<sup>30</sup> Being a Property teacher, one of my favorites is the chain of title parable, which I have seen in various forms. The version read to me as a first year law student is a letter from a lawyer to his client, a federal agency. AGentlemen:

I am in receipt of your letter of the fifth of this month inquiring as to the state of the title prior to the year 1803.

Please be advised that in the year 1803 the United States of America acquired the Territory of Louisiana from the Republic of France by Purchase. The Republic of France previously acquired title from the Spanish Crown by conquest. Spain acquired title by virtue of the discoveries of one Christopher Columbus, a Genoese sailor who had been duly authorized to embark upon his voyage of discovery by Isabella, Queen of Spain. Before granting such authority, Isabella, a pious and cautious woman, obtained the sanction of His Holiness, the Pope. The Pope is the Vicar on earth of Jesus Christ, the only son and heir apparent of God. God made Louisiana.<sup>@</sup> See Dukeminier and Krier, Property 4<sup>th</sup> Ed. 657 (1998).

I have received other versions from students over the years. In one, the letter is from a lawyer seeking a loan from the FHA. It goes as follows:

AAfter sending the information to the FHA, he received the following reply (actual letter):

> "Upon review of your letter adjoining your  
> client's loan application, we note that the  
> request is supported by an Abstract of Title.  
> While we compliment the able manner in which  
> you have prepared and presented an  
> application, we must point out that you have  
> only cleared title to the proposed collateral  
> property back to 1803. Before final approval  
> can be accorded, it will be necessary to clear  
> title back to its origin."

Annoyed, the lawyer responded as follows (actual letter):

> "Your letter regarding title in Case 189156 has  
> been received. I note that you wish to have title  
> extended further than the 194 years covered  
> by the present application. I was unaware that  
> any educated person in this country,  
> particularly those working in the property area,  
> would not know that Louisiana was purchased  
> by the U.S. from France in 1803, the year of  
> origin identified in our application. For the  
> edification of uninformed FHA bureaucrats, the

Words do not always generate the same ideas across listeners. Notice how the two versions of the Saint Jude letter have evolved in slightly different ways. Whatever the original name of the guy who lost his wife after five days, it has now evolved to Cane Walsh in one case and George Welsh in another. This mutation was probably not intentional, although we cannot be sure. After losing his wife and sending the letter, he supposedly received some money, either seven thousand or seven million dollars. This changing of the decimal might also be accidental. Very often, however, ideas mutate by intentional action. The addition of the "Send no money" and "Kiss someone you love" phrases were probably not accidental.

Some religious ideas are especially long lived. We can trace the Shaker idea back to Mother Ann Lee's split from the Quakers about 1750 and from there back to the Western Catholics, and from there back through the Catholics to Christ. Of course, we could trace many of the ideas of Christ back to earlier Jews, and from there to other religions. One of the easiest ideas to trace is a legal idea. Citations designed to generate legitimacy also provide a path for researchers to follow.<sup>31</sup> Much of the study of history is the study of how ideas have changed through time. According to Mark Twain,

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> title to land prior to U.S. ownership was  
> obtained from France, which had acquired it by  
> Right of Conquest from Spain. The land came  
> into possession of Spain by Right of Discovery  
> made in the year 1492 by a sea captain named  
> Christopher Columbus, who had been granted  
> the privilege of seeking a new route to India by  
> then reigning monarch, Isabella. The good  
> queen, being a pious woman and careful about  
> titles, almost as much as the FHA, took the  
> precaution of securing the blessing of the Pope  
> before she sold her jewels to fund Columbus'  
> expedition. Now the Pope, as I'm sure you know,  
> is the emissary of Jesus Christ, the Son of God.  
> And God, it is commonly accepted, created this  
> world. Therefore, I believe it is safe to presume  
> that He also made that part of the world called  
> Louisiana. He, therefore, would be the owner of  
> origin. I hope to hell you find His original claim  
> to be satisfactory. Now, may we have our damn  
> loan?"

They got it.A

<sup>31</sup> Jeff Lewin has traced the legal phrase "reasonable medical certainty" back to its apparent origin, though he casts some doubt as to whether the phrase has enough content to be called an idea. See Jeff L. Lewin, *The Genesis and Evolution of Legal Uncertainty about "Reasonable Medical Certainty"*, 57 *Maryland Law Review* 380 (1998). Michael Fried, a lawyer at the FTC, has traced a portion of the subsequent history of the procedural rule enunciated in *International Shoe*. Pat Baude has traced the evolution of provisions in state constitutions, Patrick Baude, *A comment on the Evolution of Direct Democracy in Western State Constitutions*, 28 *New Mexico Law Review* 343 (1998).

There is no such thing as a new idea. It is impossible. We simply take a lot of old ideas and put them into a sort of mental kaleidoscope. We give them a turn and they make new and curious combinations. We keep on turning and making new combinations indefinitely; but they are the same old pieces of colored glass that have been in use through all the ages.<sup>32</sup>

The replication of "fitter" ideas

So we have the basic elements for Darwinian evolution; ideas reproduce and there is variation across the reproductions. Some ideas are more likely to replicate than others; they are fitter ideas. There are many sources of fitness. Some ideas replicate because they make their holders feel good. One version of the St. Jude letter starts with "Kiss someone you love." That change was probably a good one from a fitness perspective. It makes the sender feel that the recipient will enjoy getting the letter and so makes the sender more likely to pass it on (although it was not convincing enough to make my sender provide his return address on the envelope). It is a warmer and fuzzier idea than without the change. It would be interesting to see how long the letter would replicate (if at all) if the starting sentence described something nasty that made readers feel sick. I would actually like to try that experiment, except I do not have enough enemies to give the letter a good start. Perhaps someone else has already tried it, but the idea had no replicative power and was wiped out of the meme pool.

Other ideas replicate because they are true. The idea that 'one plus two equals two plus one' is true. The idea that the sun revolves around the earth replicates less than the idea that the earth revolves around the sun because the former maps reality less well. We value truth. Our valuing truth may stem from culture, but it might be older and in a sense deeper than that. Valuing truth over falsity could easily have aided our ancestors to survive. Anyone who mistook a mammoth for a mate got his genes deleted from the gene pool. Those who accepted falsity as readily as truth ended up believing that there was a water hole where there was only sand. Knowing that a mushroom made others sick could keep the knower's genes away from harm. Recognizing that a person is not kin might help one predict whether that person will cooperate fairly in dividing the kill from a hunt.<sup>33</sup> In many ways, whether a thought is true or false matters to survival or reproduction of the thinker and, therefore, being able to distinguish truth from falsehood and having a preference for truthful thoughts are adaptive. In any case, regardless of why, truth matters to many people and ideas incorporating perceived truths are, all else equal, more likely to replicate.

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<sup>32</sup> Mark Twain, *A Biography: The Personal and Literary Life of Samuel Langhorne Clemens* (three volumes) (1912) New York, Harper and Brothers, by Albert Bigelow Paine, as Quoted in Mark Dawidziak, ed, *Mark Twain's Words* Mark Twain on Writing, 22-23 (1996) St. Martin's Press, New York.

<sup>33</sup> See sources discussing whether xenophobia is adaptive mentioned by Owen Jones.

The idea expressed in Beethoven's Ninth Symphony replicates not because it is true, but because it is beautiful. It is not clear why music sounds good, why we have that appetite. One possibility is that the ability to carry a tune varies with health. Those who could be tuneful showed that they were good genetic mates in that they were healthy. Another possibility is that a beautiful voice is like plumage of a peacock, attractive to potential mates just because it signals the presence of genes that will make offspring attractive to mates. In any case, our valuing tunefulness may be a way to identify good mates. If so, it is no wonder that Frank Sinatra and the Beatles were so popular with women. It is no wonder that Alison and Laura like to sing out loud and that tunes catch in their heads, and it also may be no wonder that they are slightly annoyed by hearing each other sing. Since I care about their well being, maybe there should be little mystery about why their beautiful singing is so deeply comforting to me.

Although Mark Twain was correct that ideas evolve, he was wrong to say that none are new. Some ideas are new, and indeed replicate because they are new. We like to hear and think new things. Perhaps we are naturally curious because being curious helped our ancestors find new sources of food.<sup>34</sup> Some ideas reproduce because they are comical. Jokes are my favorite meme-complexes.

Ideas might also replicate because they are happy thoughts. If an idea includes, as a component, the meme that children who are believers (or are well behaved) will get rewards such as books and toys, children capable of living up to those standards will be eager to endorse the idea. And if another component of the idea is that loved ones who die remain alive in a happier place, that comforting thought will improve the chances that the children will retain the idea as they grow beyond receiving toys.

The ideas above replicate because they make people feel good. Other ideas replicate because they help people. The idea of a round wheel is better than the idea of a square wheel, and the idea of a wagon is for some purposes better than the idea of a sled. The idea of hitting an enemy with a club is better for the hitter than the idea of hitting him with a hand. Thus, in many ways the quality of the idea influences its rate of replication. This aspect of fitness is well recognized, indeed stressed, by the marketplace metaphor.

Jokes are not as funny after we know the punch line, so it might not humor us much to pass them on. And your enjoyment of Beethoven might not do me any good. But we pass meme-complexes on for other reasons, thinking they will be new or funny, beautiful or useful, to the next person. One reason is that we want to make others feel like we felt on first hearing. We care about how others feel.

I might also pass an idea to you because your adoption of the idea will serve my interests directly. If I can convince you to adopt the idea that I am your friend, you might do me a favor in the future. If I can convince voters not to impose high taxes on me, I

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<sup>34</sup> Maybe we prize "new" ideas in part because their newness shows that they are the product of our will, rather than the product of brains enslaved by existing ideas.

will have more money to spend. If I can convince the city council that densely parked cars are dangerous to children, the council might prevent those who do not live in my neighborhood from parking in front of my house. I might attempt to propagate the idea in this Article because Indiana University will reward me for doing so. Researchers hoping to find ways to keep radioactive wastes isolated might be rewarded for finding a way to keep alive in practical perpetuity the idea that certain storage sites should never be opened.

Non-financial rewards also might accompany my writing. I could get special recognition and status if you read the essay and like it enough to recommend it to your friends. As another example, consider that my pay as a lawyer might depend on my ability to communicate an idea to a judge or client; in such cases, I am paid to pass along someone else's idea. Finally, some ideas without any value reproduce because they serve as a signal to others that the source is a member of an inside group. Like a secret handshake, the invocation of certain ideas says that the speaker is one who can be trusted or deserves cooperation.<sup>35</sup> There are many ways in which people may benefit from communicating ideas. Being the vessel of reproduction for an idea may bring rewards even if the idea is not inherently valuable.

Another way an idea can improve its chances for reproduction is to improve the chances of survival or reproduction of its holders. A religious idea containing the maxim not to eat pork serves its holders well if many available pork products harbor trichinosis. A commandment to be fruitful and multiply could result in a greater number of offspring for the holders of the credo embracing that precept. Successful human reproduction and successful idea replication flow from each other.

Compare that idea, be fruitful and multiply, to the corresponding idea embedded in the Shaker religion or, more accurately, the United Society of Believers in Christ's Second Appearing. Mother Ann Lee was the leader of the Shakers. In a moment of rapture that was to lead to generations of frustration, Mother Ann Lee envisioned that Adam and Eve had been hurled out of Eden not for eating fruit, but for having sex. Her vision also told her that she was to lead the Earth out of sin and from that time forward she promoted the idea that sexual union was an indecent, sinful, act. By living apart and avoiding the sin of sex, men and women could leave the life of this world and enter the millennial kingdom. The amazing thing about this avoid-sex-enter-kingdom meme is that it managed to survive as long as it has. It is not, however, an unqualified success. There are only eight Shakers left. Some ideas reproduce poorly because they are bad for their holders, or bad for the reproduction of their holders. We are reminded of this sad truth every time a cult wipes out its central meme in a mass suicide.

Of course, just as religious ideas need not be successful, successfully adapted ideas need not be religious. Other complicated norms evolve too. In some fascinating experiments initiated by Robert Axelrod, researchers have found that a certain spirit of

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See Axelrod.

limited cooperation may be a good strategy. These experiments model life as a series of prisoner's dilemma games. The "prisoner's dilemma" takes its name from the following type of scenario. Jean and Rich are prisoners in jail awaiting trial for a crime they committed together. The prosecutor tells each, "If you testify against your accomplice, I will give you a 1-year better deal than if you do not testify." If neither rats on the other, they each get two years in jail. If they both rat (defect), they each get three years. If just one rats, the rat gets one year and the sucker gets four years. Put more generally, the definitional requirements for a two-person prisoner's dilemma are (1) each player is better off if she defects than if she is loyal, regardless of the behavior of the other, and (2) it is better for each player if both cooperate continuously than if they take turns defecting.<sup>36</sup> A player receives the greatest payoff if she can convince the other to be loyal to her while defecting herself. The prisoner's dilemma serves as a nice model for some situations in life in which "the pursuit of self-interest by each leads to a poor outcome for all."<sup>37</sup>

Axelrod, a political scientist, set up a computer tournament involving a number of different players facing each other in repeated prisoner's dilemmas. He solicited game-playing strategies from other academicians and let those strategies fight it out in iterated prisoner's dilemmas to see which strategy yielded the best outcomes for the players in the long run. He shows easily that there is no single best strategy;<sup>38</sup> which strategy does best depends on the environment, which includes the strategies of the other players and the discount rate, i.e., the value of future outcomes relative to past outcomes.

Axelrod received 62 strategies submitted from six countries. The strategy that did the best overall in his game is called *Tit-for-tat*.<sup>39</sup> A player following this strategy initially is loyal to the other player. After that friendly start, the player becomes a "copycat," doing what the other player did on the preceding play, defect or not. This strategy is essentially embodied in the maxims "do unto others as you would have them

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<sup>36</sup> Axelrod at 10. The phrase "both cooperate" sounds redundant, but Axelrod and others call one player's loyal behavior "cooperation" even when the other player defects.

<sup>37</sup> Axelrod at 7.

<sup>38</sup> Axelrod at 15.

<sup>39</sup> Axelrod, Robert and Hamilton, William, *The Evolution of Cooperation*, 211 *Science* 1390-96 (1981); Axelrod, Robert, *The Evolution of Cooperation*, (1984). For a discussion, see also Richard Dawkins, *The Selfish Gene*, ch.12 (2d ed. 1989) and William Poundstone, *Prisoner's Dilemma: John von Neumann, Game Theory, and the Puzzle of the Bomb* (1992). See also, Martin Nowak and Karl Sigmund, *A Strategy of Win-Stay, Lose Shift That Outperforms Tit-for-Tat in the Prisoner's Dilemma Game*, 364 *Nature* 56-58 (1993) (reporting a strategy that sounds to me like "If it ain't broke, don't fix it."), Matt Ridley, *The Origins of Virtue* (1998) at 79-80 (describing a couple of other winning strategies, Pavlov, and Firm-but-Fair), Philip Kitcher, *The Evolution of Human Altruism*, 90 *Journal of Philosophy* 497-516 (1993) (showing conditions under which discriminating altruists and people who "forgive and forget" can flourish and showing how holders of different philosophies might beneficially segregate themselves and cooperate with their own type), and Jonathan Bendor and Piotr Swistak, *The Evolutionary Stability of Cooperation*, 91 *Amer. Pol. Sci. Rev.* 290 (1997). *Tit-for-tat* derives from *Tit for tat*, in which *Tit* means *light touch*, as in a *light tip*. Merriam Webster's Collegiate Dictionary, 10<sup>th</sup> ed.

do unto you" for the initial encounter, "an eye for an eye, and a tooth for a tooth"<sup>40</sup> for retaliating in subsequent repetitions for defections by the other player, and "forgive and forget" so that cooperation can be established after a defection and retaliation.

The conditions in Axelrod's experiment are not very constrictive. He does not assume that payoffs for the two players are in some common currency or measurable on some absolute scale, that payoffs are symmetrical, that cooperation is desirable for anyone but the players, or that the players are rational or have foresight or are even conscious of applying a strategy. However, for cooperation to evolve, the players must be able to recognize what the other player did and there must be a high probability of future interaction. Cooperation is not likely to emerge where there is no possibility of future cooperation or retaliation because defection is the superior strategy in those circumstances.<sup>41</sup> Although there is debate about how often Axelrod's conditions obtain, Axelrod offers a number of examples: cooperation (or not) between nations considering whether to erect trade barriers; non-cooperation between nations continuing the arms race; and interactions between members of the US Senate.<sup>42</sup> If, in prehistory, enough important real-life situations resembled a prisoner's dilemma and if the competing strategies resembled the strategies used in Axelrod's competition, we might expect people following the tit-for-tat strategy to have starved less often than people following other strategies. If the tit-for-tat idea helps its holders to survive by generating a spirit of reciprocal cooperation that allows gains from trades where there is no effective political apparatus to enforce contracts, we might expect that it will be passed along and the *idea* itself will show a strong ability to survive through replication. Axelrod's experiment suggests why revenge might be so common in social norms: societies that espouse it have survived.

Axelrod identifies four properties which tend to make a decision rule successful in his experiments: "avoidance of unnecessary conflict by cooperating as long as the other player does, provocability in the face of an unjustified defection by the other, forgiveness after responding to a provocation, and clarity of behavior so that the other player can adapt to your pattern of action."<sup>43</sup> Based on his experiments, he offers four simple

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<sup>40</sup> Both are referred to by Axelrod, at 136-37. Maybe Archie Bunker had it right. Gloria said: "That's just Revenge!", to which Archie replied, "What's a-matter with revenge? It's the perfect way to get even."

<sup>41</sup> Axelrod at 20.

<sup>42</sup> Axelrod at 4, 5, 16. He uses the example of Senators in the US Congress as players in an iterated prisoner's dilemma, noting how cooperation has evolved among them despite there being no formal rules or central authority governing much of their behavior. It is interesting to note that term limits would be quite detrimental to cooperation between members of Congress. Once Senator A knows there can be no further interactions, he knows he should defect. But if he knows that, usually so does Senator B, who knows that he should defect one step before A does because A will defect on the last interaction. But A knows B knows that, so A should defect on the third to last interaction. Thus the threads of cooperation unravel. Axelrod at 10. It is not clear that their cooperation is beneficial to the nation, but, if it is, term limits would appear to be a bad idea.

<sup>43</sup> Axelrod at 20.

suggestions for individuals: "do not be envious of the other player's success; do not be the first to defect; reciprocate both cooperation and defection; and do not be too clever."<sup>44</sup>

It is clear that any or all of these properties might be incorporated into a religion, philosophy, maxim, or some other meme-complex. And if he is right that they help the carrier, then they might be passed along to others or their carriers might fare better than those without those memes. As a particularly compelling example, he relates the story of how cooperation (a cease-fire) broke out between soldiers in hostile trenches during World War I.<sup>45</sup> Clearly it is possible that the memes leading to this particular instance of cooperation survived at least for a while by being able to keep their carriers alive.

Shifting from the individual to the Olympian perspective, Axelrod offers advice as to how a society can foster cooperation. One of the primary ways is to increase the shadow of the future, which includes making relationships more durable and interactions more frequent.<sup>46</sup> Other ways are to teach people reciprocity and to care about each other, and how to improve their ability to recognize those with whom they are dealing.<sup>47</sup> If cooperation between members of a society can make them healthier, and that can enhance the health of the nation, then nations with rules or norms that foster cooperation might be better able to protect their populations of both memes and genes from hostile attack.<sup>48</sup>

A related aspect of fitness is the environment. Truths would not replicate as well if there were no organisms that valued truth or benefitted from knowing truth. Beautiful and humorous ideas require somebody to appreciate them. Newness requires inexperience. Replicative quality cannot be determined without reference to an environment. The wagon idea is worse than the sled idea at the North pole. The idea of bearskin coats keeping Eskimos warm is high in quality when it occurs in the head of an Eskimo, but low in quality (except as a warning) in the head of a bear. Considering ideas that have replicated into the present, people have been the primary environment in which ideas are fit or not. Animals may have had lots of ideas and have communicated some of those ideas, but their apparent lack of means for recording any ideas or communicating complicated ideas has prevented animal brains from being environments in which complicated, non-instinctive ideas can survive for long. Whether an idea will survive and replicate depends in part on its quality as perceived by us. Ideas that people consider to be good ideas will be more likely to stand the test of time.

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<sup>44</sup> Axelrod at 23.

<sup>45</sup> Axelrod at 21.

<sup>46</sup> Axelrod at 126, 129.

<sup>47</sup> Axelrod at 134-36-39.

<sup>48</sup> For more generally on the evolution of cooperation, including an insistence that cooperation cannot evolve as a group trait, see Matt Ridley, *The Origins of Virtue* (1998).

I would like to distinguish environment from context, although they often merge together. Memes, like genes, have a way of banding together into effective meme carrier vehicles--larger, more complicated, meme-complexes.<sup>49</sup> The meme that it is good to have lots of children appears in a number of different religions or philosophies. The effectiveness of the nurture-children meme depends not only on the human (and that human's) environment in which it is found, but also on the greater idea within which it is embedded. If it is a part of a meme-complex that says it is good to have children because it is good to have fun, it will not carry far in people for whom having and rearing children is not all that much fun. If the meme is part of a religion that says it is good to have children because God says it will improve your chances of getting to heaven, the meme may be effective even in people for whom rearing children is painful.

Thus, fitness depends on a number of qualities that may be possessed by ideas along with the context and environment within which the idea lives. Those aspects of fitness fit within the marketplace metaphor. For the sorts of ideas exemplified so far, the marketplace-of-ideas metaphor seems apt enough. People select the ideas they want to promote from among the many available much as they select consumer products, with the broad interests (including other-regarding preferences) of the selecting person serving as the basis for choice.

### Aggressive ideas

Attractiveness to people is not the only factor important to the replicating life of an idea. Fitness depends also on the aggressiveness of the idea itself. None of the examples above involves an idea that plays an active part in its own reproduction. Yet some ideas do seem to encourage or discourage their own reproduction. A metaphor might clarify the point. Ideas are like chemical compounds. For many compounds, from plastic to steel, we choose whether to harvest and create them. But there is a group of ideas, different in nature, that are like DNA in that they have an ability to affect their own rate of reproduction. If we create new beings, viruses for example, they might recreating themselves despite our wishing they would stop. For these special ideas the marketplace metaphor does not tell the whole story. The reproduction of each of these ideas is influenced by the *idea's* interests in addition to our needs.

Some aggressive ideas masquerade as members of the group of ideas that are helpful to their holders. The Saint Jude letter says that the sender will be rewarded in cash, up to 62 million dollars according to one letter, if reproduced in time. (It also promises catastrophe to those who fail to aid in its replication.) As a result, that letter tends to replicate more readily than would one that says "You will meet financial ruin if you send a copy of this to anyone." Various religions combine claims to truth and beauty with promises of reward to adherents and promises of punishment to nonbelievers. Often, however, both the accrued rewards and punishments are not payable until after

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<sup>49</sup> See Dawkins, *The Selfish Gene*.

death. This makes it hard for us to check on the veracity of the claims. The Saint Jude letter employs a similar tactic in saying that the letter has to be sent within four days. In theory, a recipient could check on the truth of the claims in the letter; but there is not enough time to do so. It is easier just to send it on. I do not mean to imply that the adapted idea must be as simple as a chain letter or that the claims of benefits for holders are always false or untestable. Education claims benefits to holders and sometimes delivers.

Thus, DNA-like ideas, these memes or collections of memes, recommend or promote themselves. A philosophy may hold, self-reflectively, that it contains the key to truth and that the truth should be spread far and wide. If the idea catches on, it generates its own enthusiasm for transmission. Other ideas promote their propagation without claiming to be the sort of idea that should be heard and held by all. Some ideas reproduce because they push our buttons.<sup>50</sup> Creative writers aim advertising at these mental buttons. The brain has an Achilles heel that advertisers try to exploit. In a nice bit of self-protective, pre-emptive commentary, a Budweiser ad repeated "Why ask Why? Drink Bud Dry." This meme combination not only caught in my head, it discouraged any rational interrogation of its own message. Advertisers aim to create meme complexes that will both play over and over in our heads and be communicated to others. They try to send out replicating memes for which they can charge us later, one way or another.<sup>50</sup> It is not easy to see why our brains remember things that are false. The mind evolved for some reason as it is, but now it can be redeployed to other tasks, like remembering (or should I say *rememebering*) catchy jingles.

If one idea is easier to remember than others, then it has a greater chance of replication. It is hard to transmit what you cannot recall. The Shaker idea may be in trouble in part because the founders chose a name for the religion that is too hard to remember: The United Society of Believers in Christ's Second Appearing. The name of the meme-complex, its handle, matters.

Similarly, ideas that are more easily detected are more easily transmitted. Because tongues and ears are not perfect transducers, some ideas have better chances of long term survival because they are easier to say or hear. Dawkins gives the example of two phrases competing for replication by English singers: *AHail Britannia, Britannia rule the waves*<sup>@</sup> and *AHail Britannia, Britannia rules the waves*<sup>@</sup>. The former is the original, but the latter is displacing it. Dawkins suggests that the version with an "s" has an evolutionary advantage. Because the "s" makes a clear and distinctive sound, a few voices are enough to make it sound like everyone is singing an "s" on *Arules*<sup>@</sup>. It only takes a few persons singing the wrong version, the invading meme, for all of those present who are ignorant to learn the mutation instead of the original. Those who do not know that "rule" is not supposed to have an "s" at the end will learn to sing the *As*<sup>@</sup>. Not

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<sup>50</sup> Note, in this connection, the recent successful attempts to extend copyright protection further into the future.

only is It easier to hear the "s" than correct version lacking the As,@ it may be more comforting to think that Britannia does rule than to think that Britannia needs to be told to go out and rule.

Ideas can also foster their transmission by making their holders more able to transmit ideas. The idea that education is good leads its holders to get more education, which in turn gives them a greater ability to argue convincingly that education is good. The idea that priests should be celibate increases their time available for proselytizing.

Ideas can also aggressively influence their replication by increasing the number of minds exposed to the idea. Many belief systems instruct their holders to spread the word, just as the rabies gene instructs its carrier to pass it along by biting or an influenza virus instructs its carrier to spread the gene in a sneeze.

Resources are limited, even in the idea world

Ideas cannot exist in a vacuum; ideas need sustaining resources. They need a place to replicate, media within which to live. Those media include books, computers, movies, songs, and brains. These resources are vast but not unlimited. Not all ideas can be fit into one brain. There are really two limitations. First, brains are not large enough for all possible ideas.<sup>51</sup> Second, people are not entirely comfortable passing on opposing ideas. We cannot accept that a meaningful sentence and its opposite are both true. If we value the truth, we will not value, or replicate, both sentences equally. Hence, if there are inconsistent ideas in our head, one may replicate and survive, while another does not. In one way of thinking, this is the point for which Thomas Kuhn is often cited. Kuhn recognized that scientific meme-complexes can sometimes be dislodged only by other competing meme-complexes.<sup>52</sup>

Not only do inconsistent ideas sometimes have difficulty coexisting in the same head, they might have difficulty coexisting in the same culture. Suppose one idea, call it kamikaze anthropocentrism, includes as components the memes that human beings are the highest form of life and that what makes them the highest form of life is their eagerness to sacrifice their lives to proclaim their ideas. Suppose that another idea, call it kamikaze anti-anthropocentrism, contains as components the propositions that anyone who believes that humans are the highest form of life is evil and that such persons should be put to death and that any true believer should and will risk her life to implement this idea. These two ideas are not likely to exist, unmodified, for long in the same human environment. Holders of the ideas will kill each other until only one of the ideas survives. We can be reasonably confident that these two ideas cannot coexist without knowing anything about how many people "like" either of the ideas. There is a difference, I admit, between thought and action. It is possible for people to believe in an idea that says that all true believers will kill for the idea and still not kill for the idea. Practically speaking, however, it is unlikely that two such incompatible ideas will last long in the same environment.<sup>53</sup>

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<sup>51</sup> John von Neumann said that mathematical knowledge had grown to the point that a human brain could be familiar with only one fourth of it. William Poundstone, *Prisoner's Dilemma*, 33 (1992).

<sup>52</sup> Thomas Kuhn, *The Structure of Scientific Revolutions*.

<sup>53</sup> In a somewhat related vein, two species eating the identical foods in identical ways can coexist peaceably in the same test tubes, on the same rocks, or on the same islands without one species driving the other to extinction. Jonathan Weiner, *The Beak of the Finch, a Story of Evolution in Our Time*, 55 (1994).

As noted above, ideas can mutate by intentional action. Intentional modification has been a fact of life for memes much longer than for genes. When holders of antagonistic ideas live near each other, a holder of one idea can modify it by deleting some component part to make the ideas more compatible. If there are a few anthropocentrists in an environment made up mostly of kamikaze anti-anthropocentrists, we would expect some of the few to modify their belief, perhaps by making it unimportant whether holders are willing to speak and die for their beliefs. Changing the idea to include a tenet that belief in the anthropocentrist idea may properly be held in secret may help both the holders and the idea itself to survive. The idea survives by going underground. On the other hand, if the kamikaze anti-anthropocentrists are in the minority and there is an effective state system of execution for murder, kamikaze anti-anthropocentrists might modify their system of beliefs by deleting the provision that believers should kill nonbelievers, so that holders could maintain their ideological purity while refusing to kill others for their beliefs. Thus, the strengthening of the state and the enforcement of criminal law may have contributed to the softening of religious ideas that called for death to heretics.<sup>54</sup> That ideas can mutate by accident or intentional modification to allow coexistence does not, however, deny the proposition that some ideas cannot coexist. In these examples above, one of the original ideas no longer exists in its pure form.

It is dangerous to an idea for its holder to adopt an inconsistent idea because the inconsistency might be resolved in favor of the new idea. In this world of limited resources, ideas can increase their survival by isolating holders from opposing ideas. The religious idea embraced by the Amish tells its holders to avoid the influences of television and other media that might transmit competing ideas that could displace the Amish idea. Ideas opposing biological evolution have taken a similar approach. In December of 1927, a religiously fundamentalist high school teacher in Tennessee was fired for having mentioned evolution in school. One parent supporting that termination told the principal that he didn't know what "evolution" meant and didn't want his children to know either.<sup>55</sup> Thus, the anti-evolution meme assures access to the resources--ignorant minds--it needs to keep itself replicating.

We now turn to a deeply troubling type of fitness, a sort of fitness that gives this paper a reason for being.<sup>56</sup> Some ideas assure access to necessary resources by wiping out or neutralizing carriers of opposing ideas. The simplest example is the idea that holders of opposing doctrine should be assassinated. Sentences like "Those who kill the heretics are heroes." disable the opposition in two ways. First, they cause the death of

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<sup>54</sup> At the same time, they may have increased the opportunities for killing those who opposed the state.

<sup>55</sup> Marjorie Garber, *Cinema Scopes: Evolution, Media, and the Law*, in *Law in the Domains of Culture*, 131 (Austin Sarat and Thomas R. Kearns, eds.) (1998).

<sup>56</sup> It might be appropriate here to highlight the importance of this section by giving it a new heading.

holders of heretical ideas which might compete for resources. Of course, killing a human host cannot directly propagate the killer meme-complex because the potential host is dead. But death does prevent that host from seeding the competing meme-complex in other unclaimed furrows. Thus, the kill-the-heretics idea assures access to resources that would have been gobbled up by competing memes. Established meme-complexes impede the spread of many other meme-complexes, not just those that are directly contrary. Stalin and Mao accurately recognized that religious beliefs could make it more difficult for communism to catch on. Their virulent strain of communism preserved fertile fields for itself by ruthlessly eliminating those who voiced competing meme-complexes. This killing of heretics is a form of rent-seeking by memes. Memes waste human resources in their attempts to prevent other memes from being the first to capture unclaimed resources.

In addition to reducing the sources of opposing ideas, the heros-kill-heretics idea makes it less likely opposition hosts will communicate their views to new hosts. Shutting off the communication, and hence replication, of competing memes does not directly advance the replication of the killer meme-complex. But decreased reproduction of competitors leaves more resources for the killer.

St. Augustin said that forcing religious dogma on heretics was justified not on the ground that their ideas were dangerous to the idea of Christianity but on the ground that the heretics deserved and needed to be saved from eternal damnation. Of course, that rationale built into the Christian meme-complex's treatment of heretics makes the Christian meme-complex much more robust (partly by being more Christian). The kill-the-heretics idea is much more appealing, much more fit, if it says that its treatment of heretics is for their benefit, not for its own preservation. Christians would feel better saying this is for your good, not mine.

An idea might go one step further and replicate not just by harming those who oppose but by advocating the killing of persons who merely fail to espouse it. "Kill all those who will not pledge their allegiance to our Fuhrer." [we need a double dot over the Au@] When one person expresses such an idea, others will fear that their failure to make a similar proclamation will lead to death. Their pledges of fidelity to the idea will, in turn, create a fear in others. Each proclamation includes protection for the proclaimer and creates an incentive for others to jump on the bandwagon. The bandwagon effect can result in runaway memes. For a recent example of a meme that reduces the opposition by urging death to non-believers, consider the death sentence decreed on Salman Rushdie by the Ayatollah. That edict, which has now been lifted, said in effect: "All persons criticizing the Ayatollah should be put to death." So far, it has not terminated Rushdie, but other critics of the Ayatollah may have lost their lives or been silenced.

To sum up, because of differences in relative adaptivity to a selective environment, some memes will flourish while others vanish. Of course, we idea-holders are a key part of that environment. But we are not the only part. The environment also includes the ideas themselves. Some methods memes use to gain an advantage cause

harm to persons. Genocide is the extermination of genes by killing their carrier vehicles. Similarly, memocide is the extermination of memes by killing their carrier vehicles. A memocidal meme is an idea that works to kill off another meme by killing us.

### The necessity of humans

At present here on earth, complex non-instinctive ideas cannot replicate for long without us. They depend on us and we know it. But we ought not be complacent. In the future, ideas may find a way of reproducing indefinitely on their own. More important, even if that is not possible, we cannot count on ideas to act like they depend on us any more than mice on the tundra can count on arctic foxes to act like they know that foxes might not survive if they wipe out the mouse population. Driven by the same instincts that have kept their genes in the pool this far, some foxes will pursue the mice with all the more persistence as the mice approach extinction. We know ideas depend on us, but the ideas do not know that.

### That's no ordinary market<sup>57</sup>

Implications are becoming obvious. Ideas use people as vessels for their replication and have differing abilities to survive and reproduce in their human environment. Some ideas work to eliminate other competing ideas, in the worst cases by calling for the elimination of the vessels for the opposition. People are sometimes collateral damage in the battles between ideas. The universe of ideas is not simply a marketplace from which people choose the ones that suit human purposes. Ideas do not have to be sensible or beneficial or beautiful to thrive; they need only be effective. People are not in total control of relative populations of ideas. Our limited control becomes even more limited when we adopt rules, such as those preserving free speech, that prevent us from intervening in the fight among ideas. We have a choice between allowing a mostly "natural" selection of ideas and allowing purposive, human selection of ideas. We are the creators of most ideas on earth today. Having created, ought we to sit back and let ideas fight or ought we to intervene deliberately, favoring some ideas over others?

Legal rules, like other ideas, evolve. Opinions are replicated (as judges decide similar cases in similar ways), the copies can and do vary, and successor judges select which outcomes to replicate as they decide cases. Scholars have debated whether the common law decision making process causes rules to evolve toward efficiency.<sup>58</sup> One implication of the evolutionary approach to ideas is that legal ideas, rules, would have to be amazingly special indeed for us to think that they would evolve in a way that would be

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<sup>57</sup> The allusion here is to Monty Python, In search of the Holy Grail. The search party comes across a rabbit. After it rips apart one of the party, another comments "That's no ordinary rabbit." This market of ideas can be equally ferocious.

<sup>58</sup> See JLS articles from Priest through Kornhauser.

good for people. I have argued that in some limited contexts, rules might evolve toward efficiency,<sup>59</sup> but the analysis here gives me pause. As we saw above, ideas can catch on and replicate for reasons that are wholly independent of their utility to people.

The legal standard "best interests of the child", invoked by judges deciding child custody battles, is a legal idea that might not evolve toward efficiency. For one thing, it is not clear that the standard is applied honestly by judges deciding cases.<sup>60</sup> More important, it is clear that the interests of the child are at least partially external not only to the judge, but to the parents disputing custody. So it is not clear that there is an adequate avenue through which the superior efficiency of one outcome or the other would make itself heard. And even more important, it is possible that the "best interests" jingle could be repeated because judges think it makes them look good in the eyes of those who keep them in power even though it is not in the "best interests" of society.

#### Grounds for our intervention in meme selection

There are a number of possible grounds for intervening in the evolution of ideas. One such ground is to assure fair play in the competition of ideas just as we assure fair play between our children. We might decide that it is fair for an idea to assert that another idea is wrong, but unfair for an idea to urge that the competing idea be eliminated from discourse. Fairness requires that each idea be given its chance to survive. This approach runs into a self-referential problem, however, because any law prohibiting expression of an idea that urges death to other ideas is itself an idea that leads to the death of such aggressive ideas. Implementation of the position that it is fair for an idea to attack another idea but it is unfair for an idea to attack the holder of the idea runs into the same problem.

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<sup>59</sup> Stake, Status and Incentive Effects of Judicial Decisions, *Georgetown Law Journal*.

<sup>60</sup> Ira Ellman says that Scott Altman wrote on this a few years back.

### Intervention for the sake of ideas

It may be good for ideas for them to be given blanket protection from legislation, leaving it up to ideas to battle it out. On the other hand, allowing ideas a free hand in determining their own replication is not necessarily good even for ideas. Memetic diversity may be as important for ideas as genetic diversity is for genes.<sup>61</sup> The population of ideas could be healthier if it contains many different memes. It becomes harder to defend the position that we should let any and all ideas exist once we know that it is impossible for all ideas to coexist in one environment and that some ideas will work to kill off others. By working to stop the replication of some ideas, we may be able to preserve many more from extinction.<sup>62</sup> Herbert Spencer proclaimed that survival of the fittest was not just mother nature's way, it ought to be our way. That fallacy, of drawing "ought" from "is", is just as wrong for memes as it is for genes.

Hence, another potential ground for intervention is our interest in a diversity of ideas. If ideas may kill off opposing ideas, we might intervene to increase diversity. Suppose for example, that idea A is incompatible with B, C, D, and E, while idea B is incompatible with only A. Eliminating A will allow for a greater number of differing ideas than would eliminating B. This approach would reflect a policy that idea diversity is paramount. We want diversity even though the process of natural selection and survival of the fittest might result in a very limited set of ideas. However, implementing this approach would be impractical, if not impossible. Ideas are too hard to define. An idea could be broken up into multiple ideas, which would then increase the count on one side of the balance.

### Intervention for the sake of humans

As shown above, even if it were good for ideas to protect them from legislation, such protection might not be good for people. Once we know that we are important, albeit often unwitting, vessels of their transmission, it seems less sensible to say that we should stay out of the fray of competing ideas. It becomes a curious idea indeed that ideas can kill us but we cannot fight back. [[[expand or add a paragraph?]]]

Looking out for our interests is fundamentally different from looking out for the interests of ideas. Doing so requires deciding which ideas are valuable to people, expressly allowing human values (in addition to the value of idea preservation) to play a part in the decisions. What might a human-oriented free-speech policy look like? First, it would recognize that ideas can cause injury and death. To a limited extent, this is already recognized by current First Amendment doctrine, which allows states to outlaw

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<sup>61</sup> On the importance of genetic diversity to people, see generally, Office of Technology Assessment, U.S. Congress, *Technologies to Maintain Biological Diversity* 37-55 (1987); Paul Ehrlich, *The Loss of Diversity: Causes and Consequences*, in *Biodiversity* 21 (E.O. Wilson ed., 1988); E.O. Wilson, *The Diversity of Life* (1992).

<sup>62</sup> Cf. Mark Sagoff, *On Preserving the Natural Environment*, 84 *Yale L.J.* 205 (1974)(relating preservation of nature to preservation of ideas).

shouting "fire" in a crowded theater. However, current doctrine protects other speech that can lead to injury or death as long as the causation is not imminent. Such dangerous ideas might fare well in a contest with other ideas, but we might thrive in an environment that excludes them. There is no particular reason to believe that the fittest ideas are those most useful for our survival and happiness. A human-oriented free-speech policy might also recognize a distinction between -- on the one hand -- ideas that cause the death of their holders, which may be bound for extinction, and ideas that have little effect on their holders, which can be chosen according to their attractiveness, and -- on the other hand -- ideas that cause the death of people who do not embrace the idea. The latter pose a larger threat of replication to the detriment of people.

Second, even when our interests are paramount, even when they are the sole consideration, we might care about preserving a wide array of ideas. Great ideas are tributes to the human mind.<sup>63</sup> It is likely that people will benefit in the future by preserving genetic diversity today. So too with memes. Because we have little awareness today of which ideas will be important to our future welfare, it could serve us well to preserve a broad diversity of ideas. Thus, a human-oriented protection of free speech might allow states to constrain the reproduction of ideas that have special ability to eliminate other ideas from the meme pool, an ability that derives not from proving the others wrong but from discouraging their reproduction regardless of their truth.

### Civil liberty values

One way to approach the First Amendment is by focusing on the romantic ideal self realization through self expression.<sup>64</sup> Can a position that allows suppression of some speech be reconciled with a strong belief in the protection of speech? In other words, is the ACLU going to allow me to continue my membership? I hope so. Although the First Amendment constrains governments, the assumption underlying that Amendment is that it is good for people to be able to speak freely. The government causes great harm when people fear imprisonment for their speech. The same harm arises, however, when a person fears death from vigilantes for speaking out. Thus, a person in favor of truly free speech ought to be willing to consider applying the power of government to protect free speech from those who would constrain it by threats of harm. If we really care about freedom of speech, we should attend to the reality that speech can, in a meaningful way, interfere with freedom of speech. In this market, some products push the others off the shelves. Even if freedom of speech is our only goal, therefore, we might wish to allow

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<sup>63</sup> It is true that Fourier had the opinion that the principal aim of mathematics was public utility and explanation of natural phenomena; but a philosopher like him should have known that the sole end of science is the honor of the human mind, and that under this title a question about numbers is worth as much as a question about the system of the world. @ Jacobi, Carl, in *Mathematical Maxims and Minims* (edited by N. Rose, Rome Press, Inc. Raleigh NC 1988).

<sup>64</sup> See Steven H. Shiffrin, *The First Amendment, Democracy and Romance* (1990).

suppression of certain ideas.<sup>65</sup> Thomas Jefferson said, "I have sworn by the altar of God eternal hostility against every form of tyranny over the mind of man." Governmental hostility to tyrannical memes can be consistent with that sentiment.

### A proposed rule

Assuming we should intervene, how and when to intervene are difficult questions, of course. As noted above, allowing governmental intervention permits those holding political power to advance their own interests rather than societal interests, unless the standards limiting intervention are determinate. Indeed, it seems that the difficulty of spelling out clear rules as to how and when idea replication can be limited by law has, in the past, been the primary argument for the conclusion that we ought not intervene. We need a firm railing to protect us from sliding if we are to traverse this slippery slope.

To start with, a people-first approach could incorporate much of the current First Amendment doctrine. Shouting "fire" in a crowded theater would remain unprotected. The key difference would arise in the area of political speech which, being necessary to democracy, lies at the heart of the constitutional protection. The goal identified by Darwinian analysis is to prevent memes from using harm and threats of harm to human vessels as a tactic to compete with other ideas. One example, discussed above, is the speech "Death to the critics of X", where X stands for some idea. We could adopt an interpretation of the First Amendment that permits a law such as "It shall be a crime to say 'Death to the critics of X'" Allowing states to pass such a law goes too far. I could be put in jail for publishing this Article, which is surely not a just or efficient result. We need to distinguish between advocacy and discussion.

Consider a statute that says "It shall be a crime to advocate harm to a person based on her speech." This prohibition goes to the heart of the problem, attempting to corral those memes that fight by attacking the holders of competing ideas. However, it still might be a bit too broad. It could be argued that proponents of this law could themselves be jailed for advocating harm to those who express certain ideas. We need to further narrow the range of prohibitions permitted by the First Amendment by making it clear that "physical harm," for these purposes, does not include jail. The First Amendment should be amended or construed so that:

*States may punish a speaker who advocates or threatens physical injury (other than punishment by the state) to the person or possessions of those who promote, oppose, or fail to espouse a certain idea.*<sup>66</sup>

By this interpretation, states could be intolerant of intolerance.

### The worst memes

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<sup>65</sup> Anyhow, I hope this argument is good enough to keep the ACLU from revoking my membership.

<sup>66</sup> Substituting "illegal harm" for "physical injury" could create circularity problems.

We have seen that some memes are worse than others. Ideas that do not fight for their own survival and reproduction are not especially dangerous. We can pick them off the shelves for our use when we need them and, more important, put them back on the shelf when they are unhelpful. Because we care about human happiness, ideas that fight by threatening human health or survival are worse than ideas that fight by increasing human happiness or health. Because we care about the health of the meme pool, memes that endanger both humans and other memes are worse than memes that similarly endanger humans but do not endanger memes. The most dangerous memes combine two attributes: they fight for survival by silencing and reducing populations of competing memes rather than merely promoting themselves, and they threaten humans not just as humans but as carriers of opposing memes. Such memes are especially dangerous because they cut off the feedback loop that might naturally limit their propagation. Those memes trigger speech that cannot easily be fought with counter-speech.

Current First Amendment doctrine correctly recognizes that some forms of legislation are dangerous because they could cut off the feedback loop that allows the people to oppose those in power. But our First Amendment doctrine has yet to recognize that legislation is not the only species of dangerous meme.<sup>67</sup> Other, non-legislative, speech can also cut off the feedback loop that is essential to democracy. If those memes should become loosed on the nation and the Constitution paralyzes the government, Justice Jackson's fear that the Bill of Rights becomes a suicide pact may be realized.<sup>68</sup> The rule proposed here is designed to allow states to straightjacket only these most dangerous memes. Many other harmful ideas would still be protected. But some of the worst could be cabined.

### Comparison with current U.S. constitutional law

The United States Supreme Court has interpreted the First Amendment to protect speakers who voice many kinds of ideas. But the protection, to the dismay of Justice Black,<sup>69</sup> has never been absolute. If the state prohibits behavior or limits access to public fora on a content-neutral basis, such as by laws prohibiting disruption of public meetings and disturbing the peace, the law is subject to the reasonable time, place, and manner test

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<sup>67</sup> Mark Twain said, "There are laws to protect the freedom of the press's speech, but none that are worth anything to protect the people from the press." 1873 speech, "License of the Press" Monday Evening Club of Hartford, as quoted in *Mark My Words: Mark Twain on Writing*, edited by Mark Dawidziak at 105 (1996). The proposal advocated here would allow some such laws to be passed.

<sup>68</sup> *Terminiello* at 37. I do not mean to imply that Jackson would agree with the line drawn here. His opinion shows concern for cases in which the government attempts to silence ideology and seems to accept the clear and present danger test. *Id.* at 25-26. Even Jackson seems unwilling to acknowledge the lasting power of dangerous memes communicated in a peaceful context.

<sup>69</sup> See *Konigsberg v. State Bar of California*, 366 U.S. 36, 60-61 (1961) Black, J., dissenting, rehearing denied 368 U.S. 869 (1961).

to determine whether it is constitutional. The government can enforce a "quiet zone" outside a hospital, for example.

The analysis is different if the state looks to content when limiting speech or access to a traditional public forum such as a street, sidewalk, or park.<sup>70</sup> Speech containing certain kinds of memes or meme-complexes gets no Constitutional protection at all. There is no doubt that the government can ban outright and penalize fraud, perjury, attorney malpractice, obscenity,<sup>71</sup> child pornography,<sup>72</sup> fighting words,<sup>73</sup> words causing a panic,<sup>74</sup> direct threats of harm,<sup>75</sup> contracts to commit crimes, and perhaps criminal facilitation,<sup>76</sup> all without justifying its law under any Constitutional standard of scrutiny. And commercial speech gets only limited, albeit increasingly strong, protection under the First Amendment. For speech having content that falls outside those categories, usually, the government must satisfy "strict scrutiny" to justify penalizing it on the basis of the idea presented. This standard requires that the regulation be necessary to achieve a compelling state interest and that there be no less restrictive alternative regulation that would serve the same purpose.<sup>77</sup> Political speech has received this highest level of protection.

This Article argues for another entry in the classes of memes that receive no Constitutional protection. But presenting it as just another exception on a long list should not hide the fact that this dangerous speech is not just another type of speech that is low in value because it is unrelated to the democratic political process. The dangerous ideas

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<sup>70</sup> If the regulation applies to speech in non-traditional public fora, the analysis gets complicated. Speech can be limited by subject matter or the identity of the speaker, but cannot be limited by viewpoint. The line between the subject matter and viewpoint is not entirely predictable.

<sup>71</sup> See *Miller v. California*, 413 US 15 (1973)(setting forth a three-part test for obscenity).

<sup>72</sup> *New York v. Ferber*, 458 US 747 (1982)(upholding ban on child pornography).

<sup>73</sup> *Chaplinsky v. New Hampshire*, 315 US 568 (1942) (upholding conviction of speaker who called marshal a God damned racketeer and a fascist). But cf. *Gooding v. Wilson*, 405 US 518 (1972) (holding overbroad a statute that was not limited to utterances tending to incite an immediate assault). It is not clear how viable this fighting words exception remains. See Daniel A. Farber, *The First Amendment* 104-105 (1998).

<sup>74</sup> *Schenck v. United States*, 249 US 47, 52.

<sup>75</sup> Cf. *Watts v. United States*, 394 US 705 (1969) (discussed below).

<sup>76</sup> See *Rice v. Paladin Press*, 128 F.3d 233 (1997) (publisher of book on how to be a hit man not protected from civil liability by First Amendment), cert. denied 523 US 1074 (1998).

<sup>77</sup> One defect in this generalization is that courts have not applied strict scrutiny when governments punish the promulgation of a computer virus, which is a small bit of information. The prohibition of computer viruses is a prohibition based on content, the content being the idea of self-replication on computer hard disks. Likewise, strict scrutiny has not been applied to quarantines for preventing the spread of bacteria despite the fact that germs contain genetic information. A quarantine restricts the promulgation of the idea encoded in the genes of the bacterium.

singled out here for non-protection are often quite political and hence might lie close to the heart of democratic speech.

### Brandenburg v. Ohio<sup>78</sup>

In *Brandenburg v. Ohio*, the Court reversed the conviction of a Ku Klux Klan leader who had advocated violence as a means of political change in saying "If our President, our Congress, our Supreme Court continues to suppress the white, Caucasian race, it's possible that there might have to be some revengeance taken." The *Brandenburg* court said that "Constitutional guarantees of free speech and free press do not permit a State to forbid or proscribe advocacy of the use of force or of law violation except where such advocacy is directed to inciting or producing imminent lawless action and is likely to incite or produce such action." Suppose that some creed says that all heretics should be killed. Its specific text reads: "All true believers will employ any and all means to kill all people who do not advocate the supremacy of the great and powerful Oz. Do not act hastily, however. Deliberate carefully and fully before following these tenets. Plan your actions thoughtfully. Wait for at least one month after reading or hearing these words before killing anyone." What is the effect of that text? It could persist in the human environment by creating a strong incentive for our repetition of its tenets, while at the same time reducing the likelihood of survival of the vessels for competing ideas. Can states outlaw such speech under the current understanding of the U.S. Constitution? Probably not because the statement does not satisfy *Brandenburg's* requirement that it be directed to inciting and likely to produce *imminent*, lawless action.

In *Hess v. Indiana* the Supreme Court reviewed a conviction for disorderly conduct based on Hess's shouting "we'll take the fucking street later (or again)" during an antiwar demonstration. The Court overturned the conviction, saying "at worst it amounted to nothing more than advocacy of illegal action at some indefinite future time. . . . [Constitutional] guarantees of free speech and free press do not permit a state to forbid or proscribe advocacy of the use of force or of law violation except where such advocacy is directed to inciting or producing *imminent* lawless action and is likely to incite or produce such action." The Court's insistence that the violence be imminent is also shown in *NAACP v. Claiborne Hardware Co.*,<sup>79</sup> in which the Court set aside an award of damages against Charles Evers for organizing a boycott of white merchants. Evers had threatened to break the necks of people who purchased from racist stores. Applying *Brandenburg*, the Court said that no liability could attach because the acts of violence occurred weeks or months later.<sup>80</sup> Thus the *Brandenburg* test prevents punishment for speech that includes a plea for deliberative, rational, thoughtful, and

<sup>78</sup> 395 U.S. 444, 447 (1969) (per curiam).

<sup>79</sup> 458 US 886 (1982)

<sup>80</sup> *Claiborne Hardware* at 929.

delayed action even where it can be shown that the speech leads to human casualties. The standard outlined here would eliminate this imminence requirement. The defenders of OZ speech could be penalized even if the harm resulted after weeks of careful deliberation.

#### Applications of the proposed rule

Additional examples might help flesh out this rule. "Boycott anyone who advocates peace" would be protected speech because the speaker does not advocate or threaten physical harm to any possessions. Likewise with "Do not vote for any politician who advocates peace." To the same extent as under current law, people would be protecting in urging that other speakers be prevented from gaining property or position.

"All people with orange eyes should be put to death" would also be protected to the same degree as under current law. In this case the new exception to protection would not apply because the incitement to physical harm is based on the victim's eye color rather than his speech. The threat does not create any incentive to express or not to express any particular memes, except perhaps the meme of sunglasses. The victim's speech is not constrained,<sup>81</sup> and therefore the victim and sympathizers have a viable opportunity to mount a campaign against this nasty idea.

"Responsible citizens should boycott people with orange eyes" would be protected speech both because it does not urge physical harm and it does not create a disincentive to speak. It does not advocate physical harm to non-believers on the basis of their being non-believers. Would the phrase "throw the bum out of office" be subject to state suppression? No. Despite the reference to throwing, no one would take it mean that the speaker wished bodily injury would befall the politician.

By contrast, the state could punish William Randolph Hearst for entreating someone to put a bullet in President McKinley's head, both before and after someone tried.<sup>82</sup> Similarly, "All people who advocate 'peace' should be beaten" can be outlawed. Permitting punishment of this idea may seem backwards because it is more political, and therefore closer to the heart of the Bill of Rights' protection, than the idea that "orange-eyed people should be killed." The key difference lies, however, in the ability of the former idea to influence its own reproduction. The latter phrase does nothing to protect itself from opposition. The beat-the-peaceniks idea protects itself by quieting the voices of those who think it is a bad idea.

In this light, we can see that the speech protected by the Supreme Court in *Terminiello*<sup>83</sup> might be punished under the standard proposed here. *Terminiello*'s speech

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<sup>81</sup> It is conceivable that orange-eyed people would feel less like speaking, so as not to bring attention to themselves. However, no particular idea would be repressed.

<sup>82</sup> <http://www.zpub.com/sf/history/willh.html>

<sup>83</sup> 337 U.S. 1 (1948).

to an audience of "Fellow Christians"<sup>84</sup> in a Chicago church included strong condemnation of hostile pickets outside the church. He called his critics "slimy scum"<sup>85</sup> and "atheistic, communistic Jewish or Zionist Jews"<sup>86</sup> and said they had been "imported from Russia."<sup>87</sup> He made it abundantly clear that those *holding contrary religious and political views* were offensive.

Whether he advocated harm to them is a closer question. Terminiello said "We must take a Christian attitude. I don't want you to go from this hall with hatred in your heart for any person, . . ." and "Walk out of here dignified. The police will protect you. Put the women on the inside, where there will be no hurt to them. Just walk; don't stop and argue." But he also said "They were trained this afternoon. They are being led; there will be violence." and "We will not be tolerant of that mob out there. We are not going to be tolerant any longer. We are strong enough. We are not going to be tolerant of their smears any longer. We are going to stand up and dare them to smear us." and "We must not lock ourselves in an upper room for fear of the Jews. I speak of the Communistic Zionistic Jew, and those are not American Jews. We don't want them here; we want them to go back where they came from." Some proof of his intent might also be found in the pudding. The responses of the audience included: "Jews, niggers and Catholics would have to be gotten rid of." "Yes, the Jews are all killers, murderers. If we don't kill them first, they will kill us." "Yes, send the Jews back to Russia." "Kill the Jews." And violence did indeed follow the meeting, although opponents outside were also at fault for starting at least some of it. If Terminiello was advocating harm to his critics, the model suggested here would call for a result different from that reached by the Supreme Court.

As is already true under current law, the standard proposed here would require courts to difficult determinations of whether a speaker had advocated or threatened harm. In *Watts v. United States*,<sup>88</sup> the Court overturned a speaker's conviction for threatening president when he said "If they ever make me carry a rifle the first man I want to get in my sights is L.B.J." The court found that the defendant had merely engaged in political hyperbole rather than making a serious threat. Likewise, in *Hess v. Indiana*,<sup>89</sup> if Hess had talked about taking the streets now instead of later, the Court would have had to determine whether Hess's speech was directed to inciting or producing lawless action. Thus, although the meme-based approach promoted here would change the law, the new

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<sup>84</sup> at 17.

<sup>85</sup> at 17.

<sup>86</sup> at 20.

<sup>87</sup> at 19.

<sup>88</sup> 394 US 705 (1969).

<sup>89</sup> 414 US 105 (1973).

test would call upon courts to make the same sorts of determinations regarding intent as must be made under current interpretations of the constitution. It is not clear under current law whether *Adirected to producing@* refers to the content of the speech or the subjective intent of the speaker, or both.<sup>90</sup> Under my runaway meme test, a State could punish speech only if the factfinder were convinced both that the speech could be interpreted as advocating harm and that the speaker so intended it.<sup>91</sup>

The meme-based interpretation of the First Amendment would allow states to outlaw some forms of hate speech. "All uppity niggers deserve whatever they get" might at first seem to be protected, as it is today (unless it occurs where violence might be imminent). But, under the rule proposed here, that sentence could be outlawed without infringing the First Amendment right to free speech. First, a court could easily and reasonably interpret the word "uppity" to refer to persons who speak out for their interests. Second, the phrase "deserve" could easily and reasonably be recognized as advocacy of whatever punishment might be inflicted upon them. And third, the word "nigger" has such strong historic connotations of violence against people of color that a court could reasonably read "what they get" as referring to physical harm.

An interesting case is presented by a recent decision in Norway. The state convicted a man for advocating laws making it illegal for black people to have children. He appealed his conviction on the ground that it violated paragraph 100 of the Norwegian constitution, which guarantees free speech. His conviction was upheld. By contrast, under current American doctrine, he would have won. Would the American result be different under the meme-oriented test proposed here? One could argue that having children is a form of expression, a form of speech. And, as discussed above, rules that affect fertility can influence the propagation of memes. Nevertheless, this advocacy would still be protected in the United States even if the meme-based test were adopted because the Norwegian defendant did not advocate "harm." As long as the legal punishment under his proposed law would be jail or a fine, his advocacy of unfair treatment of blacks does not call for them to come to harm.

Another type of speech that might qualify for less protection than it now receives is pornography. Feminist scholars have argued that pornography encourages men to treat women as chattels. If the argument went no further, pornography would qualify as a protected meme even under this Article-s approach. But the argument does go further. Some feminists argue that pornography silences women who would speak out against it or speak in favor of some other, pro-women, meme-complex. If their premise can be proved, if pornography reasonably creates in women a fear of physical harm for speaking

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<sup>90</sup> See Daniel A. Farber, *The First Amendment* 70 (1998).

<sup>91</sup> This proof would have to be beyond a reasonable doubt in the criminal context, and perhaps in the civil context as well.

out in opposition to it, pornography could qualify as a dangerous meme under the test proposed here.

There is concern on many campuses, and maybe more concern off-campus, about political correctness. According to the philosopher Daniel Dennett, political correctness is a form of eumemics.<sup>92</sup> Ideas are squelched by threatening ostracism to those who speak them. However, ordinary, politically-correct censorship would continue to be constitutionally protected speech because it does not include a threat of physical harm to body or property because the threat of job loss is not a threat of physical harm to property. In other words, the word "property" as used here does not include everything under the "new property" umbrella.

The reader should not conclude that, because politically-correct censorship would remain protected speech, I think it is not harmful. For a member of an academic community, or any community, ostracism may be worse than many forms of physical harm to person or property. Indeed, such censorship may do more net harm to society than other some other speech that would lose protection under the meme-based test. To that extent, the test proposed here is admittedly imperfect. That does not mean, though, that it is not better than the current approach.

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<sup>92</sup> Daniel C. Dennet, *Darwin's Dangerous Idea*, at 465.

### Threats of other types of harm

It is clear from the examples above that this Darwin-based test will not allow all harmful speech to be outlawed. McCarthyism was both harmful and tended to silence its opposition, but it would still be protected speech unless it could be shown to include threats of physical harm to the person or property of the opposition.

Why not go further? To start, I am leaving some speech for later examination. There are a number of types of speech that are harmful to people that are currently unprotected, from lies to commercial speech to "fire". Other areas that now have protection might, with the help of evolutionary theory, be identified for specific exclusion under the First Amendment protection. But those areas are outside the scope of this Article. The focus here is on political speech broadly conceived, speech about ideas. Even within that limited domain, however, the proposal here is limited. Why not adopt more extensive human-centered limitations on political speech? For example, Jews have in the past been precluded from holding certain jobs because of their religion.<sup>93</sup> Those promoting these rules have, by their speech, reduced the opportunities for those with certain competing (Jewish, in this case) beliefs to spread their beliefs and created a disincentive to adopting and expressing those competing beliefs. However, making it illegal to advocate that persons of certain beliefs should not be allowed to hold certain jobs could interfere directly with the democratic political process. Good political campaigns include arguments over whether a person with certain views should hold office. We want voters to be able to debate whether the holder of specified beliefs should be elected. Within the political speech arena, then, we do not want to impede expression of all speech that undermines opposing ideas.

Threats of job loss can be a very effective deterrent to speech, but they do not qualify as physical harm to person or property under the rule proposed here. If such non-physical threats were to be included, governments could suppress too much speech. If other approaches can be found that will protect people but also offer little risk of being used to suppress beneficial speech, they should be considered.<sup>94</sup> But for now, no such approaches appear, and the aggressive-speech test proposed here should be limited to threats of physical harm to those who voice opposition. McCarthyism could occur under the test proposed here, just as it occurred under the broader reading of the First Amendment supported by the marketplace of ideas metaphor.

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<sup>93</sup> Get cite from Steve Goldberg. In *A Study of American Intelligence*, C.C. Brigham stated that Jews were low in intelligence. (Just one of the defects in his study was that he measured recent immigrants that did not know English as well other subjects.) See Steven J. Gould, *The Mismeasure of Man* 225 (1981).

<sup>94</sup> It might, however, be possible to simply draw a line of distinction between ordinary job loss and elected office. One situation that would have to be considered is the threat of job loss for an elected person based on the speech of her appointees. However, these details might be worked out and it might be possible to extend the test proposed here to protect speakers from job loss as well as physical harm.

## Hate crimes

The meme idea might help identify one component of the harm in some hate crimes. Matthew Shepard, a 105 pound college student, may have died for having expressed an idea, the idea that he was gay or the idea that his killers might be gay. According to one news story, he was beaten and crucified for having made suggestive remarks to a man in a Wyoming bar. Clearly the actions of the killers are not protected by the First Amendment, even though there was a component of hateful, intolerant expression in their behavior. Because their behavior is not protected speech, the proposal above has no direct application to the situation. However, one principle underlying the proposal is that it is desirable to protect the diversity of memes in addition to protecting human health. Let us suppose that Shepard tried to communicate that >being gay is OK,= and that his killers did not like that message. If so, these killers have committed an act that seems designed to silence that expression and obviously has the potential to do so. For that reason, they have done more harm than if they had killed in the course of a burglary. Shepard's opposing memes died with him. The hateful ideas held by his assailants will live a while longer. They have harmed the meme pool as well as the gene pool.<sup>95</sup> Since the harm is qualitatively greater, it is reasonable to impose a greater punishment on them than if their killing had not been in reaction to Shepard's expression. Wyoming does not increase the punishment for crimes of hate but the theory presented here could support doing so in this situation.

We can see from this example, however, that hate crimes are more ambiguous memocide than hate speech. With hate speech, we can look at the speech itself in determining whether it advocates death or harm to holders of opposing ideas. In looking at a murder, we do not always have words as evidence of whether there was any intent to kill memes as well as genes. It is hard to tell whether Shepard's killers acted in part to try to wipe out some meme he had expressed. It is possible, but highly unlikely, that the killers harbored the meme "it is good to kill those who express the idea 'Shepard is gay'". Their expression of that meme could be punished, but they probably did not hold so narrow a meme. They might have believed "it is good to kill those who express the idea >I am gay.=@ Should we increase the severity of the crime when memocide was a motivation?

Think of the idea "black is beautiful." Do not many black persons who allow their clothes to expose their skin express that idea? And could not any killing of a black person by someone who knows her skin color be interpreted to be an attempt to kill those who express the idea, black is beautiful? And could not the killing of a black person lead others to cover up more completely, suppressing the expression of the idea "black is beautiful"? It is impossible to distinguish between the persons who kill because the

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<sup>95</sup> AKill all the orange-eyed people@ may also harm the meme pool, but it is less likely. Killing orange eyed people kills memes only randomly. There is no reason to believe that it will kill off any particular memes. In addition, it does not create an incentive for a person to refrain from voicing any particular memes.

victim was black and the persons who killed because the victim expressed the idea that he was black. For this reason, it might be best not to vary the punishment for murder with whether it was motivated in part by antagonism to a certain meme-complex. Perhaps a better approach is to look for hate speech and punish it, and apply something like the felony murder rule to increase the penalty for murder when it is accompanied by hate speech.

Would a meme-based version of the First Amendment protect Tupac Shakur's song, *Crooked Ass Nigga*?<sup>96</sup> In it, he says, "Coming quickly up the street, is the punk ass police. The first one jumped out and said freeze. I popped him in his knees and shot him punk please." Assuming that this advocates violence, does it aim the violence at speakers of opposing thoughts? Certainly the police are viewed as the opposition and police voluntarily choose to be in that opposition. The lyrics could easily have the effect of reducing the supply of persons willing to be police. And it could be argued that being a police officer makes a statement of sorts, perhaps in favor of law and order. Nevertheless, while it is true that the job of enforcing the law works in opposition to lawlessness, being a police officer is not speech against lawlessness. It would not be illogical for a person to take a job on a police force, say to feed her family, even though she believed in anarchy rather than law and order. Enforcing the law is not necessarily an expression of the view that the law should be enforced. Some people just do their jobs.<sup>97</sup> Hence, Tupac's speech would remain protected.

#### Abortion speech

The recent killing of Dr. Barnett Slepian, a doctor who performed abortions in upstate New York, shows the power of memes. Dr. Slepian might be alive but for the previous statements of right-to-life zealots following the murders of Drs. David Gunn and John Britton. After his Florida pro-life murder of Dr. Britton, Paul Hill said "Whatever force is legitimate in defending a born child is legitimate in defending an unborn child."<sup>98</sup> Maybe his words found a responsive environment in the brain of Slepian's murderer. And the idea lives on; the infection spreads. Rev. Donald Spitz,

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<sup>96</sup> 2PAC, *Crooked Ass Nigga*, on *2PACALYPSE NOW* (Interscope Records/Atlantic 1991).

<sup>97</sup> Suppose the state made the belief in enforcing the law a job requirement for officers. In that situation their joining the force reflects an idea. I would not, however, allow the state to use this hiring criterion as a means of undermining Tupac's right to sing his song. Indeed, it would violate freedom of speech to limit police jobs to those holding political views against anarchy.

<sup>98</sup> [www.leaderu.com/ftissues/ft9412/killing.html](http://www.leaderu.com/ftissues/ft9412/killing.html)

director of Pro-life Virginia, has played his part as a vessel of reproduction. He sent a note to Slepian's widow following the murder which said, "The shooter is a hero. Whatever action is justified to save the life of a born baby is justified to save the life of an unborn baby."<sup>99</sup> The idea, kill the abortionists, predictably metastasized to the Internet, through which it could reproduce all the faster. A "Christian" web page, ANuremberg Files,<sup>@</sup> listed those who the speakers would like to see killed, with a line drawn through Slepian's name.<sup>100</sup> The extended phenotype of this meme-complex includes dead doctors. Dr. Slepian himself had no doubt about this. He wrote in a letter to the editor, "Please don't feign surprise, dismay and certainly not innocence when a more volatile and less restrained member of the group decides to react . . . by shooting an abortion provider."<sup>101</sup> Should this powerful and dangerous meme-complex be allowed to reproduce?

Under current doctrine, the kill-the-abortionists message is protected speech.<sup>102</sup> Because it is clear that the statement advocates death or physical harm to abortion doctors, whether the statement could be outlawed under the standard promoted here depends on whether performing abortions is a form of speech, an expression of an idea. Doctors might say that their action does not endorse abortion; legal medicine, not endorsement of constitutional rights, is their trade. On the other hand, if their performance of legal abortions is an expression of the view that the constitution gives women, not doctors or legislators, the right to choose, then the religious meme that says it is right to kill abortion doctors is an idea that tends to silence its opposition.

In this case, the decision against protection under the memetic approach urged here is made easier by the fact that the Nuremberg Files advocate death to many different opponents, not only those whose expression takes the form of action, but also those who speak with tongues. The web site includes the following lists: "abortionists: the baby butchers", "clinic owners & workers: their weapons providers and bearers", "judges:

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<sup>99</sup> Ellen Goodman, No one should be surprised by assassination of doctor, The Herald-Times, Friday October 30, 1998, A8.

<sup>100</sup> The web site, formerly at [www.christiangallery.com/atrocity/aborts.html](http://www.christiangallery.com/atrocity/aborts.html) has now been closed. The names that were in grey had been "wounded", the names with a line through them were "fatalities". A federal jury awarded one hundred million dollars damages against this web site. The operators say they will not pay. Washington Post, page 1, Wednesday February 3, 1999.

<sup>101</sup> Ellen Goodman.

<sup>102</sup> But see the decision in the federal district court. That decision, however, seems destined for reversal in the Ninth Circuit court of Appeals in part because the speakers did not threaten the objects of violence. Judge Kozinski said "Where is the direct threat in this case? . . . This is speech in a public forum directed to the public. True, some of them might be kooks, violently inclined and perhaps criminal. But that's what the First Amendment is about." See Howard Mintz, "Anti-abortion Web site likely protected under First amendment" Sept. 13, 2000. The position taken here, of course, is that we can do better than that view of the First Amendment. [We need to update with the results of this appeal.\*\*\*]

their shysters" (including Justice Sandra Day O'Connor), "politicians: their mouthpieces" (including Bob Dole), "law enforcement: their bloodhounds" (including Janet Reno), and "miscellaneous spouses and other blood flunkies" (including David Gunn, Jr., the son of David Gunn the murdered doctor)<sup>103</sup>. As the reader's cursor rolls over some names, the program pops up the home address and telephone number, to instill additional fear. It would be hard for these Christians to argue that they are not trying to silence the opposition. Advocates of choice will reasonably worry their words will bring them within the scope of a high powered rifle.

### Arguments over amending the First Amendment

What if a politician took up the memetic perspective urged in this Article, but carried it further than is recommended here? Suppose he proposed to repeal the First Amendment, citing the great danger of memes harming people. One response might be, >Memes don't kill people, People do.= Under the analysis here, that position is untenable.

Another response might be to outlaw his speech. Would that be allowed under the test proposed here, or is his call for repeal of the First Amendment protected? Because he urges no harm to those voicing opposition, his speech would be protected and cannot be outlawed. This leads, of course, to a dilemma.<sup>104</sup> The great weakness of the First Amendment is that it protects those who attack it. It prevents the government from defending the current interpretation against the attack in this Article. And this Article does not advocate making the Constitution more able to immunize itself from the ideas presented here.

### The need to narrow the First Amendment

Many would assert that there is no need to narrow the protections of the First Amendment. Our system of free speech is too strong to be undermined by a dangerous meme or meme-complex. The wisdom of adopting the proposal in this Article hinges on the odds of dangerous memes spreading and causing harm to humans. Obviously, I cannot prove that many humans will die unless we modify our interpretation the First Amendment or I would have done so pages ago. Nor can I prove that deaths in the past would not have occurred but for memes. We will never be completely certain as to causation. We have to make a guess. My guess is that Barnett Slepian would be alive but for the Nuremberg files website and other expressions of that hateful meme.

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<sup>103</sup> His father's name has been crossed out on the list of doctors.

<sup>104</sup> See Jackson's dissent in Terminiello, at 30. He quotes Goebbels as saying "When democracy granted democratic methods for us in the times of opposition, this [Nazi seizure of power] was bound to happen in a democratic system. However, we National Socialists never asserted that we represented a democratic point of view, but we have declared openly that we used democratic methods only in order to gain the power and that, after assuming the power, we would deny to our adversaries without any consideration the means which were granted to us in the times of [our] opposition."

The danger goes beyond the horror of individual deaths. I see no good reason to believe we are immune to memes that would cause large-scale societal damage, as well as to individuals. We are vulnerable to memes that may undermine democracy and free speech itself in the future. The Nazis used free speech to gain power and then curtailed it to maintain their power. The fact that there are few that would attack freedom of speech in the US today is no cause to be sanguine. Nazism under Hitler did not take long to develop. The people who helped and allowed it were not alien beings teleported to earth; they were human beings, as are we. What would make our culture able to fend off memocidal nationalistic memes when the German culture did not? Certainly our cultural antibodies were insufficient to prevent a cultural bout of McCarthyism just a few years later. Infections of dangerous memes can spread quickly precisely because they have the power to stifle production of the antidote; they muffle opposition. It is true that, so far and for the most part, the good memes have eventually defeated the bad ones. But nothing ensured that result. And, even if the good memes will always win in the end, the unfathomable agony caused by Nazism and the terrifically high costs of containing the bad memes once unloosed are enough to justify some preventative measures. If we could travel back to 1932,<sup>105</sup> surely we would be willing to give up at least some freedom of speech (the freedom to advocate harm to speakers) to save millions of innocent lives.

Would it not be possible to invent a meme-complex that would protect us from the dangerous memes so that we can let them float freely in discourse rather than subjecting their speakers to quarantine? Could we not inoculate ourselves against the bad memes? Nazism did generate antibodies that still exist in the population today, squelching some of the dangerous memes before they take hold. But even Nazism, which was far more virulent a strain than we would ever wish to inject into ourselves was not enough to prevent a different virulent meme, McCarthyism, from sweeping through the minds of those who fought Hitler.

Another approach would be to invent a good meme, one that fights dangerous memes, and spread it through the population. That is the purpose of this Article. By pointing out the insidious nature of dangerous memes, their ability to cut off the feedback loop that protects us from them, I hope to heighten our vigilance. Ironically, the more the idea in this Article replicates, the less we may need a constitutional amendment or reinterpretation. The more you hate my normative argument for restricting the First Amendment, the harder you should work to propagate my descriptive proposition. Unfortunately, even if it triggers other articles (as Dawkins' book spawned it), replications of this Article in ordinary academic channels cannot be successful enough to protect us. The dangerous memes have time on their side. For this meme (or any other)

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<sup>105</sup> Of course, we cannot pinpoint the source of the Nazi meme. It is possible that the meme that it is okay for allies to punish Germans, which developed out of World War I, morphed into the meme that it is okay for Germans to punish Jews.

to have a chance against them, it needs some form of super-meme status, it needs to be incorporated into a more powerful idea, it needs to be part of the law.

The need to restrict the First Amendment increases as communications become speedier. Human evolution proceeds today at about the same pace as it has for millennia. Ideas, however, have dramatically increased their rate of replication during recent centuries. The first huge step was Gutenberg's invention of the press. It allowed a meme to replicate much faster than it could have done by the quill of monks or the voice of the most powerful orator. Another important step was the Pony Express, followed later by other improvements in transportation such as the automobile and airplane. Marconi and Tychociner of course did their part to enhance meme replication, greatly surpassing the speed of earlier transmissions over great distances, although the number of listeners was severely limited by the cost of electronic ears. Telephones, radio, and television, in turn, enhanced the replication rate for ideas. And more lately, the Internet has speeded the global transmission of meme-complexes, such as the truth of Fermat's last theorem, to nearly the speed of light. Via computers and the *net*, ideas can be replicated with very few resources. As their rate of replication increases, so does the chance of a dangerous meme taking hold. Computers thus exacerbate the problem created when people have bad ideas.

Not only is there a greater ability for a bad meme to sweep through a human population, increased replication rates open up additional opportunities for bad memes to arise.<sup>106</sup> Because replication is imperfect, as memes replicate faster, they might mutate faster. Modern electronic replications are much less prone to accidental errors than mouth-to-mouth replications, so unintentional or accidental mutations might not happen any quicker than in the past. But intentional mutations are easily created and the huge number of replications gives countless opportunities for intentional modification. Technology has increased the sheer number of different memes. Since there is no reason to believe that the dangerous replicators are diminishing as a percentage of all ideas, an increase in numbers means an increase in the number of bad memes and a greater chance that the really big nasty one will be created. Moreover, we should expect that memes, like other evolving organisms, will with time become better adapted to their environment.

Finally, memes have a huge advantage over genes in that new combinations can be made out of very different parents. For the most part, so far, genes of horses could not get together with genes of humans to make viable new genes. As is proved by the centaur, memes are not similarly limited. Just as sexual reproduction leads to vastly quicker variation than asexual reproduction, memetic combination will lead to far quicker variation in memes than sexual reproduction creates in genes. Sexual mating requires that the mates share a common ancestor in the not too distant past. By contrast, your ideas and mine can get together to form new ideas without regard to whether our ideas

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<sup>106</sup> Creedence Clearwater Revival was right when they sang "I see a bad meme risin'."

came from some common memetic stock. Another way of putting this is that memes have the advantage of being able to evolve by Lamarckian evolution. They need not rely on mutation of the genotype. The phenotypes that acquire beneficial adaptations can pass them on. Like genes only more so, memes will find ways to group together with other memes to make increasingly fit carriers. They have not had much time to adapt, but some have already become quite hearty. It is hard to imagine how robust ideas may become in the future. In other words, we haven't seen the worst yet.

## Computers

Although computers make bad speech especially dangerous, it is doubtful that lines can or will be drawn allowing suppression of computer communications when the same speech would be protected in other fora.<sup>107</sup> Networked computers have too much potential for improving democracy. It might be thought that Internet speech is less dangerous than the same speech in person. Unlike someone on a picket line, a person using a computer to urge harm to carriers of the opposing ideas rarely has an opportunity to actually inflict physical harm on them. Moreover, there is less opportunity on the Internet for anyone else to identify the persons with the heretical views. If the listener is on the net, he can see the message and maybe the messages of the opposition, but he has no physical access to the person sending the heretical messages. As a dog in a *New Yorker* cartoon put it, "On the Internet, no one knows you're a dog." All these points ought not reduce our fears about Internet speech, however. The Internet can still be used to promulgate speech such as "Kill the heretics," which can have the effect of discouraging heretics from speaking in other fora. As a result, Internet speech should also be subject to the dangerous meme exception to First Amendment protection.

So far, this Article has assumed that ideas are generated by people. But it is easy to see that computers are increasingly in the business of generating ideas. It might not be too long before we will not be able to distinguish between ideas generated by a computer and ideas generated by a human. Computers can already generate complicated "ideas" such as chess strategies and (supposed) improvements to grammar. Ideas no longer require a human underwriter to be created or to replicate. And search engines

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<sup>107</sup> See *Reno v. ACLU*, no. 96-511 at end of section V (1997) (invalidating the "indecent transmission" and "patently offensive display" provisions of the Communications Decency Act of 1996).

exist to look regularly for occurrences of certain ideas. Web site operators make money based on the number of times that other computers "hit" a web site.<sup>108</sup> Computer owners in the future, like academics, advertisers, rock stars, and playwrights today, may be paid for generating ideas that are reiterated by others. In addition, computers create possibilities for new variations on the ancient chain letter and pyramid scheme. In many ways today, and in more ways in the future, the more "popular" an idea, the more profitable it could be. And popularity need not be measured by human appreciation.

Economic incentives are now in place for programmers to design programs that generate and replicate ideas that other computers will access and replicate. Should such computer programs be free, in the name of free speech, to generate whatever programs are most competitive? Should a computer virus, or virus generating program, be protected by the principle of free speech? It seems likely that computers will generate ideas that are harmful to people, though popular with computers or even people. What will and should happen if the government tries to outlaw such ideas? Certainly the owners of the programs will object on the grounds of free speech and they will likely be accorded standing to sue. Should courts honor their free-speech defense?

We will not be able to deny free-speech protection on the ground that only human speech counts because we will be unable to distinguish effectively between computer-generated ideas and human-generated ideas. Even today it is difficult to determine the source of an idea that starts with a computer search for and downloading of, certain types of cases, followed by human selection of ones that are closely related in an interesting way, followed by a grammar check and improvement done by the computer, and an automatic mailing to all members of a certain list. A major commercial point of computerization is to substitute computer effort for human effort. As software becomes more sophisticated, the portion of human effort in the final product diminishes. It will be quite difficult, and I think not fruitful, to try to limit free-speech rights on the ground of the importance of computer contribution. But a rule drawn by reference to the aggressiveness of ideas may provide a solution.

Attending to aggressiveness may also help us understand why the government can outlaw computer viruses. Prohibiting viruses does not, on its face, seem to be content neutral. We can partially escape the muddle by looking to the harm the government seeks to avert instead of the virus itself. The state may punish people who express themselves by vandalizing cemeteries because the law is not aimed at any particular content. States may punish those who disrupt lawful meetings on the same basis: the state is not trying to protect or preclude any particular idea. Likewise, the state might punish the virus communicator, because the virus does harm that is not related to any particular communication; there is no identifiable idea that the government tries to protect. But this rationale is not completely satisfying because the virus would do no harm if there were no idea on the hard disk. The virus does its harm solely by harming

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<sup>108</sup> The rewards can come from direct charges to users, advertising revenues, and government subsidies.

other memes and the government aims to protect ideas, those that are not viruses. Put the other way around, the government attempts to preclude a particular idea, even though it is not trying to protect any particular idea.<sup>109</sup> The virus differs from an innocuous message only in its content. One could find no indicator of a virus in the electrons streaming through telephone wires, the holes burnt into the compact disk, or the magnetic charge on a floppy or hard disk. The difference between viruses and other messages is that the placement of the positive and negative magnetic charges on a tape or computer disk, or the placement of the pits on a compact disk, is changed. Only by understanding the code can one tell a virus from many non-viruses. And the harm done by a virus is only to ideas, ideas that were in competition with the virus for valuable disk space. The evolutionary approach proposed here would, at least in a general way, support our sensible conclusion that the communication of a computer virus should not be protected by the First Amendment. The virus, like the other dangerous ideas discussed above, is harmful because it attacks opposing ideas. It attempts to disable the very ideas that would fight against it. That is just the sort of idea that we should push outside the protective shadow of the Constitution.

#### The need for an international solution

As shown by the erroneous news that Fermat's last theorem had been proved, the Internet makes possible quick international communication of false ideas. Plainly, ideas generated in one country may do harm in another. And that harm may occur even though the idea is not replicated in the harmed country. Moreover, it will be very difficult, probably impossible, to attempt to stop harmful ideas at national borders. For these reasons, it will be important for human welfare to find an international solution so that harmful speech can be outlawed at its point of origin rather than trying to deal with its effects everywhere it is read. Even if we cannot negotiate international solutions, however, we should not give up on national solutions. Stopping replication within our borders is as important as preventing entry.

#### A library of bad memes

In the interests of science we preserve some very dangerous bacteria. We might similarly wish to keep alive some very dangerous ideas. Just as we take extensive precautions to protect the public from the harmful bacteria, we should protect the public from the dangerous memes. We could and maybe should put all illegal memes in a high security library. Anyone wanting to contribute ideas to that library would be allowed to do so. The public might or might not be given entry to read in this library. But photocopying and similar reproductive techniques would definitely not be permitted. I

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<sup>109</sup> This is the obverse of the Spence case. There, the prohibition on some uses of the flag was an attempt to protect a certain message of patriotism, although the government did not attempt to preclude any particular message.

do not argue that any ideas should become extinct.<sup>110</sup> The most dangerous ones should, however, be confined to a sort of Jurassic Park rather than being allowed to roam freely.

### Conclusion<sup>111</sup>

It could be argued, quite accurately, that the concrete proposal offered here does not go far enough. Ideas can do much harm to humans, and this new reading of the First Amendment would not reduce the protection given many harmful ideas. States could not outlaw much more than they can already outlaw. In a way that is a strength of the proposal; operationally, it is not radical. Our constitutional rights should not change rapidly. This proposal would allow states to criminalize only a little more speech than under current law. Is such a small change worth it? Perhaps so. It could be very important to a few people if it saves their lives. And, although it is unlikely that a virulent memocidal meme will invade the American body politic, who can say that an undated mutation of Hitler's Nazism is impossible? The odds are low, but the consequences are so grave that it may be worth buying some insurance against the contingency. Justice Jackson may be right that "In the long run, maintenance of free speech will be more endangered if the population can have no protection from the abuses which lead to violence."<sup>112</sup>

Setting aside the normative issues, this Article argues for changing the meme we use to describe human adoption of ideas. Holmes said

"But when men have realized that time has upset many fighting faiths, they may come to believe . . . that the ultimate good desired is better reached by free trade in ideas--that the best test of truth is the power of the thought to get itself accepted in the competition of the market, . . . That, at least, is the theory of our Constitution. It is an experiment, as all life is an experiment. Every year if not every day we have to wager our salvation upon some prophecy based upon imperfect knowledge."<sup>113</sup>

This marketplace-of-ideas meme has forerunners in our Nation's early history. Thomas Jefferson wrote, "We have nothing to fear from the demoralizing reasonings of some, if

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<sup>110</sup> The small pox virus is so dangerous that some people think it should be eradicated entirely. See recent New Yorker article. It is possible that there are ideas that have similar capacity to wipe out tens of millions of people in short order, but I think the law should presume, until it is shown otherwise, that no meme can kill so many so quickly.

<sup>111</sup> If this Article seems too redundant, blame a ridiculously virulent self-replicating meme that I cannot seem to get out of my head.

<sup>112</sup> Terminiello at 37. But see, Jackson, AFreedom to differ is not limited to things that do not matter much. That would be a mere shadow of freedom. The test of its substance is the right to differ as to things that touch the heart of the existing order. West Virginia State Board of Education v. Barnette, 319 U.S. 624, 642, 63 S.Ct. 1178.

<sup>113</sup> at 630

others are left free to demonstrate their errors and especially when the law stands ready to punish the first criminal act produced by the false reasonings; these are safer corrections than the conscience of the judge."<sup>114</sup> Jefferson, Holmes, and Brandeis believed that bad speech can be countered with good speech. These three brilliant lights may be excused for not recognizing that time for rebuttal, though necessary, is not a sufficient condition to create a fair opportunity for rebuttal of a memocidal bad idea.<sup>115</sup> When they wrote, evolutionary theory had not yet been applied to ideas. It is time to replace the marketplace metaphor with a better one, *the primeval soup*.<sup>116</sup> In this primeval soup, some ideas survive and some do not. And we are part of the soup, the environment, and have some power to influence the results. But we are not in complete control of our memes. And the ideas that eventually survive in this primeval soup will not necessarily be our friends.<sup>117</sup>

An important point of this Article is that the evolutionary struggle for survival is not just among ideas or among people, but also between people and ideas. This struggle is not expressed by the marketplace-of-ideas metaphor often invoked in policy discussions of the First Amendment. But the us-versus-them model is also too simple; it ignores the interconnection between us and them. People are a product not only of genes, but also of memes. Our minds are constructed in part by our experience and some of our experience is invasion by memes. Memes have structured our minds to make us who we are.<sup>118</sup> We are the phenotype of both our genes and our memes. To the extent that there are bad human consequences of free speech, the strong free speech advocate might say "We have met the enemy, and he is us."<sup>119</sup> But this approach, like the marketplace metaphor, fails to recognize that ideas have power too. They make up a big part of us, but they are not merely parts of us.

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<sup>114</sup> Letter from Thomas Jefferson to Elijah Boardman, New Milford, Conn. (July 3, 1801), quoted in Charles A. Beard, *The Great American Tradition: A Challenge for the Fourth of July*, 123 *Nation* 7, 8 (1926), quoted in *Whitney v. California*, 274 U.S. 357, 375 n.2 (1927) (Brandeis, J., concurring), overruled in part by *Brandenburg*, 395 U.S. 444. Note that the quotation does include the premise that "others are left free" to demonstrate errors. The point is that some kinds of speech eliminate that very freedom.

<sup>115</sup> I confess that I am not entirely comfortable saying that Jefferson, Holmes, and Brandeis are all in error. Even the greatest brains, however, can harbor memes that are wrong. Both theory and experience have taught, since they spoke, that bad ideas can be quite catchy.

<sup>116</sup> Owen Jones suggests an alternative, the *Abreeding ground of ideas*.

<sup>117</sup> As Dawkins puts it, "There is nothing magic about Darwinian fitness in the genetic sense. There is no law giving it priority as the fundamental quantity that is maximized." *The Extended Phenotype* at 110.

<sup>118</sup> Dennet at 365.

<sup>119</sup> Walt Kelly, 1971 Earth Day Cartoon, Pogo speaking to Porkypine.

People are not always the enemy; sometimes ideas are the enemy. Some ideas are better and some are worse for human survival, for cultural survival, and even for idea survival. Some ideas will make us into people we do not want to be. To ignore this is to deny the power of ideas. Some might argue it is a "morally unacceptable proposition that words alone can overcome human will."<sup>120</sup> It is not obvious to me that an acknowledgment that "words alone" can influence behavior is a denial of free will; but, if one has to pick between the two, the teacher in me cannot give up the belief that mere words do influence behavior, and sometimes in ways that are not entirely welcomed by the listener. Songs spread from my daughter Laura to her sister Alison and back again. They say they have no control. But they do have *some* control. Richard Dawkins notes that we humans are special in that we have the power to rebel against the tyranny of the selfish replicators.<sup>121</sup> As one small part of that rebellion, we must overthrow the Marketplace of ideas@metaphor which itself reinforces and legitimates the tyranny of selfish replicating memes.

THE END

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<sup>120</sup> See David R. Dow & R. Scott Shildes, Rethinking the Clear and Present Danger Test, 73 Ind. L. J. 1217 (1997).

<sup>121</sup> As John Hiatt would say *Awe can choose, we ain't no amoebas.*@Thing Called Love (1987).