

A case study in the pathogenesis of an intellectually infectious disease

In his popular book *The Selfish Gene*, biologist Richard Dawkins coined the term "meme" to indicate "a unit of cultural transmission." Dawkins wanted a word that would signify kinship with the word "gene," because he conceives of the meme as a "replicator."

In the May 2011 edition of the *Smithsonian*, science writer James Gleick poses this question in the title of his article: "What Defines a Meme?" He finds Jacques Monod to have been a precursor of meme theory:

Ideas have "spreading power," he noted – "infectivity, as it were" – and some more than others. An example of an infectious idea might be a religious ideology that gains sway over a large group of people.

Dawkins added tunes, catchphrases, and images like the smiley face to his definition of a meme, but ideas are the most dangerous of the memetic pathogens and will occupy our attention here.

Gleick is drawing upon Monod's *Chance and Necessity* (Alfred A. Knopf, 1971), which contains the following paragraph:

For a biologist it is tempting to draw a parallel between the evolution of

ideas and that of the biosphere. For while the abstract kingdom stands at a yet greater distance above the biosphere than the latter does above the nonliving universe, ideas have retained some of the properties of organisms. Like them, they tend to perpetuate their structure and to breed; they too can fuse, recombine, segregate their content; indeed they too can evolve, and in this evolution selection must surely play an important role. I shall not hazard a theory of the selection of ideas.

Gleick quotes most of this passage. However, he paraphrases the opening sentence so he can omit Monod's use of the word "tempting," with its note of hesitancy in introducing the parallel between ideas and organisms; and he omits the final sentence, where Monod indicates a reluctance to push the comparison too far. Gleick would have done well to respect the cautionary note that Monod strikes:

The "spreading power" – the infectivity, as it were – of ideas, is much more difficult to analyze.

Monod, then, is making an analogy that is, in its context, lighthearted and almost fantastical: he notes briefly and in passing that the evolution of ideas shares certain features with the evolution of species. Just as the organisms in the biosphere thrive by means of the natural selection of those traits that promote the adaptation and perpetuation of their species, so it appears that ideas too undergo a process of selection based on their intellectual fitness to survive.

Monod does not vet this analogy very carefully for overall pertinence. But I do not fault him: he wrote before the "science" of memetics caught hold; before, even, the word "meme" had been invented. What seems to strike him is a single interesting point of comparison: that ideas resemble viruses; that the idea will infect the host organism unless that host has intellectual antibodies stored up with which to combat it. He never

imagined this offhand aperçu would ever generate a full-blown pseudoscience.

He was speaking metaphorically, but it may be worth our while to pursue the analogy. Unlike an idea, a virus can be seen with a microscope, as can the antibodies. Of more salience is this distinction: the virus, attaching itself to a human host, begins to replicate *within* the body of the host, whereas the replication of the idea is *between* hosts. It is true that Influenza A can spread from one person to another by contagion, and it appears that ideas too can be contagious; but the analogy works best if the equivalent of the individual human attacked by a replicating virus is the particular *society* attacked by the replicating idea. True, an influenza pandemic is made up of millions of diseased individuals carrying the virus; a mass movement is made up of millions of individuals infected by an idea. But the description I have just given of the influenza pandemic is the utmost of the evil under our observation: the virus has done its worst; its victims are the millions of infected persons. In contradistinction, the description I have just given of the mass movement does not yet include any malignancy. Only when the members of the movement act against other persons will we have a national tragedy; and the persons acted against – the victims of the pandemic of evil – will not be the infected party – the sick people are the people who do the attacking. This draws our attention to the place where the analogy breaks down dramatically, and the point is instructive: a sick human is overrun by viruses; a sick society is overrun by humans. These humans do not *carry* the disease, they *are* the disease: the agents of death in the influenza pandemic are the *viruses*, which kill the diseased persons; the agents of death in the pandemic of evil are the *human beings*, not the meme, who kill the healthy persons who have refused to be infected.

This turns out to be exactly what Monod says in the passage that Gleick paraphrases but does not see fit to reproduce *verbatim*:

The important thing about the stout armature a religious ideology constitutes for a society is not what goes into its structure, but the fact that this structure is accepted, that it gains sway.

Now let us compare this to Gleick's sentence, which is carelessly reductive of Monod's:

An example of an infectious idea might be a religious ideology that gains sway over a large group of people.

No, the *idea* does not gain sway; *some people* gain sway over *other* people. Monod emphasizes exactly this point: that the *content* of the meme – "what goes into its structure" – is not the important factor, but only "the fact that this structure is accepted." The idea, or meme, has no power of its own, but predominates simply by being adopted. Gleick's immediate inference that a leader who gathers followers does so by means of the idea is unwarranted. Suppose a handsome military recruiter comes to town in his spiffy uniform, and leaves with several boys in tow, who are now also wearing the uniform. Was it the uniform that gained sway over them? No, it was the recruiter: it would have meant nothing to them had their fat fathers worn the uniform. But the uniform does bind the troop of boys into a cohesive military unit the way the doctrine of the Trinity binds a group of believers into a cohesive religious unit. It has *symbolic* significance.

On closer inspection, every person wearing the uniform differs in the degree of his care and concern about it; and in the case of an intellectual uniform, the variance is even wider. John Calvin had a theological opponent judicially murdered over a small

point of disagreement about the nature of the second person of the Trinity; but many members of Calvinist churches today could not give you a coherent or even an incoherent account of the Trinitarian doctrine. Each member of a sect will understand the intellectual fashion differently. But every person infected by Influenza A will run a temperature – without joining with other persons similarly stricken to form an in-group organized around the most charismatic sufferer.

Monod scoffs at the postulate that an idea gains traction because of its objective truth, and the memologists would of course agree with him about that – in light of human history, they have to. But Gleick and his cohorts, carried away by the false part of the analogy between biological and cultural evolution, nonetheless think that *some* quality in the meme engenders its success. Not so. Some quality *in the people who adopt the meme* engenders its success: *they* insure that it "is accepted, that it gains sway." That quality is nothing more, I submit, than their desire to constitute a group in the first place. The group originates in the dominance of its founders or in the susceptibility of natural-born followers to the sight of others who are in the process of constituting a group and are inviting them to join it. But on what *basis* will this group be constituted? Humans, afflicted by their possession of, and possession by, a highly developed neocortex with active prefrontal lobes, and inhabiting powerfully elaborated language-based fictions, resort to cognitive legerdemain: instead of answering, "The society will be constituted on the basis of our desire to constitute a society," they answer, "The society will be constituted on the basis of a shared intellectual allegiance to certain propositions." This sounds better than saying, "On the basis of our shared desire to bind ourselves to each other." It sounds *much* better than saying, "On the

basis of a shared secret handshake, a shared wearing of the special beret, and our shared singing of anthems about fellowship." These symbolic actions are highly visible and taken quite seriously by those who perform them, but these are the effects of clubbish behavior rather than the cause. In the case of the Christian religion, in addition to the shared belief in the Trinity, we also find the shared eating and drinking of wheat wafers and fermented or unfermented grape juice – the fermentation of the grape juice is a contentious matter among sects – and shared recitations of self-abasement before an all-powerful deity. Any effort to examine the contagious qualities of the ideas of Original Sin, the Trinity, the Incarnation, the Sacrifice, and the Atonement will run aground on the failure of these memes – which are preposterous to those of us who possess the requisite intellectual antibodies – to similarly infect the people of the Orient. While equally endangered by an influenza pandemic, they are immunized against Christian dogmas. Contrariwise, the memes of maya, samsara, karma, and reincarnation have little catching power in the West. The key element in the spread of a religion is not the infectivity of the meme itself, but the adoption of the meme by certain persons who induce other persons to adopt it in a chain reaction. Perhaps it is only natural that we probe the content of the meme for the secret of its success, but it is a mug's game; indeed, that way madness lies. For when we rule out, as the explanation for a meme's success, its truth, efficacy, utility, contribution to human happiness, and every other quality worthy of the name of "good," we are left finally with the irreducible fact of a community organized around the idea of a community. And who has not noticed that, among members of religious communities, their *professed* adherence to a particular meme in no way implies an *actual* adherence to the meme? Never make the

mistake of expecting a Christian to turn the other cheek.

How can we take the study of the content of the meme seriously at all? Certainly a religious community will point to its memes and emphasize how they differ from the memes of other religious communities. What strikes the outside observer is how picayune these differences are. However, these rivalrous communities resemble each other psychologically in every way. The only difference between them that makes a difference is the relative intensity of their sworn enmity toward each other. This was manifest when, for instance, in the 16th century, the rancor of Christians toward Muslims was forgotten in the moment of a schism between Christians and Christians, whereupon Europeans abandoned the liberation of Jerusalem from the infidels and instead slaughtered each other in staggering numbers over whether the Real Presence is achieved by means of transubstantiation or consubstantiation. Among adherents of the latter view, there was a conflict, never resolved, over whether the consubstantiation is achieved by means of Christ's ubiquity or His ubivolipresence. When Freud attributed these holy wars to "the narcissism of small differences," he merely labeled what he needed to explain; but at least his phrase directs us away from any temptation to believe that the intellectual content of the meme is decisive. Where a difference is small, or microscopic, we must look at the narcissism rather than the difference.

Instance: as far as Luther was concerned, any difference between him and another person about anything at all was huge and instantly made the dissenter "other" – this is the working definition of narcissism. It especially riled him when his former allies deserted his cause, so he was quickest to unleash his homicidal violence on his fellow Protestants – on German peasants, and on the followers of Zwingli. But that did

not mean that he became more forgiving toward the Whore of Babylon, the Jews, or the Muslims. All his enemies were going to hell and needed to be dispatched there as soon as possible. He merely took what he counted as betrayal by fellow Protestants more personally than he took the depredations of Catholics and heathens. Freud failed to understand that to a narcissist, no difference *is* small.

But does this not mean that Luther took "consubstantiation" and its alleged difference from "transubstantiation" very seriously indeed? Certainly – but only because ego has to be invested in something rather than nothing. A memologist trying to discover the intellectual allure of Luther's idea about the Eucharist is searching for fool's gold. A historian knows very well that Luther's disciples followed *him* and not his dogma. Many in his entourage must have inwardly groaned when, having compromised with Zwingli on fourteen out of fifteen contested points, Luther broke up the parley over the one issue remaining, and insisted with childish literalism on the Real Presence because a rendering in the Greek language of unknown Aramaic words reads "This *is* my body" rather than "This is *like* my body." Luther would have recognized a simile but failed to grasp a metaphor. But his acolytes trailed him out of the meeting and joined him in pronouncing anathema upon all enemies of God. Then thousands died over it.

One feels silly having to say the obvious: an idea has no agency; it does not replicate on its own; it cannot infect on the basis of its own structure. It has to be taken up by human beings – in the case of the Protestant Reformation, human beings with a multitude of agendas, many of them at cross-purposes, who united behind the person of Luther. They were magnetized by his worst qualities – his certainty, his dogmatism, and his inflexibility, which they read (correctly) as signifying his granitic conviction. At first,

they merely hoped to oppose the greedy priests and princes who had been oppressing them time immemorial; but they found at the last that they were now oppressed by a new "Lutheran" church that was even more antipathetic to life and liveliness than the old. Early and late, memes like reading the Bible in German and rejecting the add-ons of the Roman Catholic Church have been merely the equivalent of the secret handshake and the school anthem. Gleick *almost* understands this:

This was not to suggest that memes are conscious actors; only that they are entities with interests that can be furthered by natural selection. Their interests are not our interests.

No, memes are entities. Period. They do not have interests. Humans have interests, and those interests can be furthered when other humans take them up.

Here is Gleick's ally Daniel Dennett: "A meme is an information-packet with attitude." No, a meme is an information-packet. Period. It does not have attitude. People with attitude use it for self-aggrandizement.

Here is novelist Donald Mitchell: "The human world is made of stories, not people. The people the stories use to tell themselves are not to be blamed." Mitchell is a novelist and he is using words poetically. Gleick's misappropriation of this colorful tribute to the power of story-telling requires me to be pedantic where I have no desire to be; but I must insist that the human world is made of people who tell stories. The stories that are told are not to be blamed.

But surely I do not deny that large numbers of people, even numbering in the hundreds of millions, may take up an idea – Marxism in the 20th century, let us say – and talk

about it day and night, and fight and die for it. There must be *some* quality in the idea itself that elicits such loyalty and determination, especially inasmuch as, during the time of its ascendance, a myriad of alternative ideas come and go, seemingly out-competed and leaving no trace at all. So it would appear. And yet . . . how are we to explain that, a mere decade after the dissolution of the Soviet Union, almost no one subscribed any longer to the Marxist meme? What can have changed so quickly and decisively in the world to render the Marxist meme so little infectious? What prophylactic, what vaccination, stemmed the tide of the pandemic?

Certainly all effects have causes, and we are not remiss in seeking reasons for the rise and fall of the meme. We might be tempted to say that Marxism appealed to many people who harbored ideals about economic and social justice, but when it proved tyrannical and inefficient in practice, it was abandoned as "the God that failed." But any such account is far too neat – when communism was at its most tyrannical, it continued to gain converts; when it began to moderate its earlier excesses, it lost them.

Statements about memetic fitness to replicate are always going to founder on counter-examples: we see useful memes that replicate wildly, useful memes that die aborning; crazy memes that catch on, crazy memes that infect only a handful of enthusiasts, and crazy memes that are scorned by one and all only to erupt in the population-at-large with incredible virulence after a latency period of decades or even centuries. The power of the idea has no power over those people that it has no power over. It can only be that the *people* change.

Another way of talking about natural selection is to focus on the environment rather than the gene. Changing conditions create the evolutionary pressures that select

the genes that are fittest to survive in the new environment. *We* are the environment for memes; so clearly, instead of trying to determine what it is about the *meme* that causes it to catch on, we need to turn our attention to what it is about *us*. But these are deep waters. How can humans, for starters, embrace contradictory memes? – *i.e.*, The Son of God is the Prince of Peace and He favors a policy of military aggression and a huge cache of cataclysmic weapons. The answer is that we can inhabit multiple rhetorical worlds, all equally detached from reality and each hermetically sealed off from the others. Almost any meme that panders to our laziness and our wildly inflated self-esteem has a chance. But even here, we should be examining pack mentality rather than the consciousness of the lone wolf: the success of the meme with any one individual is always dependent upon its co-adoption by others. (A lone subscriber to a meme who becomes publicly loud and obnoxious about it is usually judged, with good reason, to be psychotic.)

I admit that it is confusing. I have downplayed the content of the meme in favor of the influence of persons on persons. But when we look at the great leaders of history, we find that most of them are lacking in, of all things, charisma. It seems that mass movements are founded on neither the truth and usefulness of the ideas *nor* the mesmeric power of their promulgators. Instead, mass movements are founded on the movement of the masses. It is true that the ideas are all-important for these masses – so important that the leaders may be singularly unattractive, as the phenomenon of the "Tea Party" demonstrates. But this merely testifies to the truism that a movement without any ideas at all is an impossibility. The content of the unifying idea does not matter. But those who carry its torch will never know this and can plausibly deny it,

because their leader, or his chief theoretician, will be glad to sit down with a journalist and explicate the movement's intellectual agenda in mind-numbing detail, to the applause of all his disciples.

What really imbues an idea with its replicative magic, then, is *conviction* – displayed first by the self-deluded leader, then by the followers. In 1923, hardly anybody in Germany organized his thought-world around anti-Semitic canards, but by 1933 almost everybody had come to believe that the nation was imperiled by Jews and that the danger must be met and the problem solved. Was this due to Hitler? Anyone who watches films of his speeches today must wonder why he was not viewed as a laughingstock. In fact, he was regarded as a buffoon in 1923, and would have continued to be had the Great Depression not plunged Germany into despair. Then am I admitting that the anti-Semitic meme was alluring? Only in the broadest sense, in that the times came to favor a scapegoating explanation for the nation's woes – whereupon the meme, and the party of the meme, were ready to hand. The Nazis were compounded out of the anti-Semitism meme, the stab-in-the-back meme, the Lutheran-obedience meme, the unemployment meme, and the failure-of-liberalism meme. But the secret of the Nazi ascension lay neither in the power of the memes, which were individually and collectively shabby and paranoid, nor in Hitler's personal magic, of which he had none; it lay in the Nazi Party's stubborn adherence to its program, exemplified by Hitler's own unwavering confidence in it, at a time when Weimar decadence, ineptitude, and turpitude created a condition where any firm commitment to any set of principles whatsoever finally came to seem preferable to the status quo. Most important of all, it lay in Adolf Eichmann and his stolid, unimaginative discipleship,

multiplied by millions.

In pronouncing Eichmann to be the epitome of the banality of evil, Hannah Arendt tried to direct us to the locus of the phenomenon, only to have the phrase itself neutered by the willful misunderstanding of her detractors. To ask about the content of the meme that infected Eichmann is as futile as to ask Eichmann himself what its appeal to him was. He might have spouted party propaganda in answer to that question, and spoken of Hitler's charisma, but what appealed to him was obedience itself, not the content of the orders that he obeyed, and not even the glamor of the man who gave the orders.

Arendt went so far as to say that Eichmann was at bottom incapable of thought. He was born to adopt what he called the little man's version of the categorical imperative: "Act in such a way that the Führer, if he knew my action, would approve it." But he would have adopted that maxim regardless of who the Führer was, regardless of what the Führer believed, and no matter what the Führer ordered him to do. It was the categorical imperative itself, not its content, that claimed his allegiance; it was discipleship itself, not the leader.

We may as well try to understand the origin and appeal of a fashion in dress. Clark Gable without an undershirt, Jennifer Beals in a torn sweatshirt – was it the power of the meme pursuing its own agenda? Of course not. Are such fads imaginable in the absence of a celebrity culture? Could a vogue for wearing a torn sweatshirt have originated with Beulah Perkins of Tulsa, Oklahoma? Admittedly, some fashions originate among the hoi polloi, but rarely because a canny marketer or an ordinary schmo with flair and originality has sussed out the *Zeitgeist*. Who invented the miniskirt,

and was that person a genius? Or had individually intrepid women over several generations gone out scattershot in skirts shorter than the norm, always with disastrous results socially, until the Keeper of the Years said "Now"? Who first wore a baseball cap backwards? The adoption of an intellectual fashion happens exactly the same way and for the same non-reasons. During the "Arab Spring," the entire Arab-Muslim world was convulsed by a popular uprising that began with the bureaucratic harassment of a street vendor in Tunisia. If we say confidently that democratic government and political freedom are powerful memes, then we must explain why those memes had lain dormant over the previous 30 years.

We might be tempted to assume that there are two distinct sets of memes that prosper, one infecting the vast army of conforming dolts and another lodging within the small cadre of semi-independent thinkers. This assertion cannot help but capture a piece of the truth, but even so we will go broke trying to bet on the next big thing with either bloc. It is the bane of liberal pundits that beginning in 1966 the working class deserted the Democratic Party in favor of the party of plutocracy. As I write, destitute voters continue to act on the fatuous belief that their lottery tickets may pan out and they will some day benefit from low taxes on the very rich. Certainly we can analyze this phenomenon in terms of an inventory of characteristics shared by all those ideas that gain wide popularity by fastening upon the psychological weaknesses of ignoramuses: we can say that successful political memes flatter the *amour propre* of those who hold them; that ideally they make few demands and promise great rewards. Put this way, the success of Republican memes – cut taxes and carry a big stick – sounds almost inevitable. But from the election of Franklin Roosevelt in 1932 through the election of

Lyndon Johnson in 1964, Republican memes – especially the eminently successful meme that has lately transformed the epithet "liberal" into a code word for a socialist, immoralist, and traitor – were the object of widespread voter derision.

What turned the entire country toward the nostrums of free-market proponents? The naive view is that it must have been a dawning realization in the realm of economic policy, but actually it was an accident having nothing whatever to do with fiscal policy or with authentically conservative ideas. When Lyndon Johnson, at the helm of the Democratic Party, signed two pieces of civil rights legislation in the middle 1960s, millions of white southern racists switched their political allegiance to a Republican Party that assured them of a warm reception. Out of this historic realignment came the "Southern Strategy" and then the "Reagan Revolution"; and following the trajectory of its success, the Republican Party devolved ever further into right-wing demagoguery. A white bigot seeking the social comfort of affiliation with other white bigots does not necessarily believe in the deregulation of business, an aggressively imperialistic foreign policy, and low taxes on the rich. But in a mysterious manner, all these commitments flowed together into a new meme, best encapsulated as "Liberals are socialistic nihilistic destroyers." The country woke up to the interesting phenomenon of devoutly evangelical Christians, for whom the Sermon on the Mount is the literal and inerrant Word of God, advocating for a strong national defense built around a thermonuclear arsenal and for deep cuts in social services that help the very poor.

Can we attribute such a phenomenon to the power of conservative "ideas"? Would that be the idea that it was fiscally irresponsible for Jimmy Carter to borrow \$70 billion a year in the aftermath of a disastrous war but fiscally responsible for Ronald

Reagan to borrow \$235 billion a year during peacetime so he could use tax cuts to redistribute the national wealth from the poor to the rich? Clearly, the factors that contributed to the success of the meme were woven out of wildly disparate strands of the national psyche: the continuation of white racism in more polite forms; the hangover produced by our defeat in Vietnam; Reagan's cheerful demeanor. The "family values" vote swung decisively away from a born-again church-going Baptist to a lazy, hedonistic, religiously-unobservant, twice-married former actor who was estranged at one time or another from all of his children. Even Reagan's stupidity was recast as moral clarity, so much so that for the next four decades the likeliest winner of any Republican primary would be the dumbest candidate running. No one sees these things coming. They cannot be analyzed in terms of the inherent power of the ideas to replicate and infect. We just have to wake up every morning and see what pure chance hath wrought.

But are the memes that infect intellectuals of a higher order? Not at all. Their susceptibility to memetics itself as a "science" is Exhibit A that they are as likely as the dunces to be taken in by arrant nonsense.

Gleick's article, when published on the Internet, drew a number of reader comments, and one of the earliest, by "John," effectively demolished it:

A theory that explains everything explains nothing. So it is with the wide ranging, no, sloppy, category developed by Dawkins. Thirty years of memetics and not one single solitary solid prediction, not one single solitary fundamental insight into culture or social exchange of ideas. No worthwhile empirical studies, no experiments, no blossoming of theories. Only frivolous, handwaving rationalizations about how memes do this and that. But no real insights provided. Thought contagion or homophily?

You cannot determine the difference. [*N.B.*, Homophily is summed up by "Birds of a feather flock together."] Compare the advancement of science with the conception of the quantum, or the quark, and then the meme. That should clue you all in. In short, not a science. Not even pseudoscience. Just a cult. Convenient fictions may help illustrate a situation, but they do nothing to explain it. The vital principle, animal magnetism, the liquid calorific, and now, memes.

I would demur only from the writer's remark that memetics is a cult. It is not even a cult. It is just a few self-proclaimed intellectuals engaging in word-magic, of the sort that Moliere parodied several centuries ago: when the quack physician in *The Imaginary Invalid* is asked how opium induces sleep, he replies that "it contains a dormitive principle whose nature it is to put the senses to sleep." If you believe that a real gain in knowledge occurs when morphine is called a dormitive principle, then you will believe that a real gain in knowledge occurs when an idea is called a meme.

Now the difference between ubiquity and ubivolipresence, while trivial to most of us, is a large enough difference to make a difference. It is not the same thing to say that Christ is always present at the Eucharist because he is always everywhere at once as to say that Christ is present because he has chosen to show up. Those are two different ideas and the difference is meaningful to the opposing parties. But the difference between "John is unmarried" and "John is a bachelor" is *not* a real difference. And the difference between a meme and an idea is not a real difference. The words are synonyms. But it does matter that "memologists" do not know this, just as it mattered that Luther did not know that the difference between a simile and a metaphor.

Another comment:

My perception of the problem people have with the concept of memes is no different than most people have with the indeterminacy of economics.

Both are incredibly complex systems that don't give themselves over to easy understanding, at least at a scientific level.

No. The problem with economics is that *economists* don't understand it. The problem with "the concept of memes" is that it is so easy to understand that people cannot believe that there isn't more to it. When it is explained to them that a "meme" is an "idea," with no change in meaning whatsoever, they naturally ask why a new word was needed. When they are told that the entire world literature on memes would say the exact same thing if a global search-and-replace substituted the words "idea, tune, catchphrase, or image" for the word "meme" – that there would be no change in the meaning of any of the sentences – they fall back upon the hypothesis that there simply *must* be something about memes that does not give itself over to easy understanding. But in truth, the only phenomenon here that does not give itself over to easy understanding is the susceptibility to the belief in memes among people who, by virtue of their education, should know better. I suppose, by their own account, their intellectual immune systems have been compromised and they are now infected by the meme meme.