



# The Online Disinformation Opera

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*This article looks at how the Internet and social media feed disinformation and fake news to nonreality-based communities.*

*A foolish faith in authority is the worst enemy of truth.*  
—Albert Einstein<sup>1</sup>

**D**isinformatics, as I have used the term, refers broadly to the study of the use (abuse) of misinformation and disinformation.<sup>2,3</sup> Disinformatics reveals itself at the intersection of technology, propaganda, and miscreants. Its domain is the glue that binds together modern faux news outlets, AM talk radio, Twitter storms, message boards, social media platforms, and sundry other sources of psychosociopathic babble and weaponized politics. Because of the widespread use of disinformation in modern politics, there are two subareas of disinformatics that deserve immediate attention: 1) a study of the underlying psychology behind the popularity of the phenomenon and 2) a study of the ways

modern computing and networking technologies contribute to the problem? As 1) falls primarily within the domain of the social sciences, we shall focus on 2).

## FUNGIBLE TRUTH AND THE POWELL DEFENSE

I want to frame this discussion with two different perspectives on truth and reality. Together they will roughly circumscribe how

disinformation fits within our epistemological palate. I've added labels for convenience.

## A TRADITIONAL PERSPECTIVE

*The relevant facts are what they are regardless of what we may believe about them... We cannot alter the facts nor, similarly, can we affect the truth about the facts, merely by the exercise of judgment or by an impulse of desire... The most irreducibly bad thing about lies is that they contrive to interfere with, and to impair, our natural effort to apprehend the real state of affairs. They are designed to prevent us from being in touch with what is really going on. In telling a lie, the liar tries to mislead us into believing facts are other than they actually are. He tries to impose his will on us.—Harry Frankfurt<sup>4</sup>*

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## A POSTMODERN PERSPECTIVE

*The [presidential] aide said that guys like me [reporter] were “in what we call the reality-based community,” which he defined as people who “believe that solutions emerge from your judicious study of discernible reality.” That’s not the way the world really works anymore... “We’re an empire now, and when we act, we create our own reality. And while you’re studying that reality—judiciously, as you will—we’ll act again, creating other new realities, which you can study too, and that’s how things will sort out. We’re history’s actors... and you, all of you, will be left to just study what we do.” —Ron Suskind<sup>5</sup>*

It should be emphasized that veridical exceptionalism expresses itself in the form of newspeak, doublespeak, doublethink, and so on, introduced by Orwell over a half-century ago, so the topic is nothing new.

The traditional perspective is the subject of formal logic and epistemology classes familiar to college graduates. For those of us with science and engineering backgrounds, the traditional account of truth and reality expressed by Harry Frankfurt is what we might consider the received view. Frankfurt’s remarks imply some variation of what philosophers call a correspondence theory of truth whereby a sentence is true iff it corresponds to reality or some state of affairs. I’m taking a few shortcuts here. My simplification doesn’t do justice to the nuances involved,<sup>6</sup> but it will do for present purposes.

Although the authorship of the particular postmodern perspective quoted by journalist Ron Suskind has been disputed, he claims that its source was a named top presidential aid in the George W. Bush administration. Whether it was or not is largely irrelevant because the sentiment expressed

by the quote is very real in modern politics and as such should be taken seriously. This quote exposes the tenet of veridical exceptionalism, which holds that when sufficiently powerful, the controlling elite (aka nomenklatura) can work outside the accepted norms of intelligent communication and makeup their own standards of truth and reality when it serves their purpose—usually to manipulate some target audience. These elites have become identified in the past few decades with the post-truth, alt-fact, fake news, and big-lies movements associated in the United States with right-wing politics, prosperity theology, conspiracy theories, astrology, mythology, occultism, and sundry other tribal delusions. Kurt Andersen convincingly argues

that what I’m calling veridical exceptionalism underlies a modern fantasy-industrial complex.<sup>7</sup> It should be emphasized that veridical exceptionalism expresses itself in the form of newspeak, doublespeak, doublethink, and so on, introduced by Orwell over a half-century ago,<sup>8</sup> so the topic is nothing new. But while it has been studied extensively by psychologists and social scientists under the rubric of cognitive distortions,<sup>9,10</sup> little attention has been paid to the topic by the commercial media and political pundits, so the public remains largely unaware of its scope and influence. There is no shortage of scholarship, only a shortage of public interest and understanding.

Scientists and engineers learned early on that if our computer programs are to run correctly, our bridges and buildings to remain sound, and our rockets to successfully navigate through outer space, we need to rely on

mathematical tools that are ultimately grounded in first-order logic and classical set theory—that is, the foundation of the traditional perspective that Harry Frankfurt embraces. Of course, we occasionally expand our tool set with multivalued logic, fuzzy logic, intuitionistic logic, modal logic, and so on when needed for special purposes, but it is always understood that these paradigms are departures from, and not replacements of, classical logic and set theory. The notion of truth comes into our model when we seek to assess whether the sentences of our formal systems accord with reality. Truth is a thus a benchmark of veracity. It is the yardstick that compares the degree to which a statement correctly depicts reality and facts.

On the contrary, the political myopia found in our postmodern account of truth precludes any straightforward measure of veracity. The political “reality” is voluntary, privileged, and not subject to verification. In this Humpty Dumpty epistemology, which I’m labeling *veridical exceptionalism*, there can never be a consistent correspondence between a statement and reality because reality is always a moving target. Nonetheless, this account needs to be taken seriously as it is at the heart of a great deal of modern politics. Failure to take this mindset seriously has led scholars, journalists, and political commentators to engage in wild goose chases as they attempt to document and reconcile volumes of political lies, distortions, and disinformation—accurately, but less purpose and effect than one might expect.<sup>11–13</sup>

The question naturally arises what are we to do with such ungrounded political communication? One thing that cannot be done productively is to take such political rhetoric literally.<sup>14</sup> It is pointless to attempt to determine the truth value of a great deal of political speech as it lacks sufficient semantic anchors for evaluation. It is far more reasonable to consider political speech as political or ideological performances: proclamations that must

be evaluated not in terms of truth or falsity but rather by felicity conditions stripped of sincerity by the author. We evaluate these proclamations on the basis of goodness of fit with an ideology and how well they serve the interests of the host tribe, and not an association with facts or reality. Three rhetorical postulates provide a starting point for the interpretation of such political speech: 1) the meaning of a statement is its effect on the political base; 2) political performances are extralogical and only exist in a fantasy world known to the speaker and a tribe; and 3) politicized speech is a woven fabric made from yarns of truth, lies, BS, disinformation, propaganda, and so on, which are very hard to distinguish once the fabric is woven.<sup>14</sup> We emphasize how much more transparent the “semantics” of nonsensical political speech is under our analysis. A statement like “Ted Cruz is an anchor baby” is best seen for what it is—political theater. Two consequences immediately follow. First, it is pointless to attempt to verify the truth of the statement because it captures a political performance whose function is to delegitimize the views of a political opponent. Second, no amount of contradictory information will render the meme unserviceable. Meme-based semantics is not alethic—correspondent or otherwise. To assume otherwise is a category mistake. To repurpose Marshall McLuhan, a political meme is the message. Once it is “out there” it takes on a life of its own. In a very real sense, a politician’s speech is akin to the comments of a rabid sports fan. To try to extract a justification for a position from either is hopeless—truth is what serves the purposes of the base, fan or political.

We return now to the central theme of Humpty Dumpty epistemology: there is no reality beyond whatever is needed to galvanize the tribe, and questions of truth and falsity simply do not apply. We refer to this as the “Sidney Powell defense” because she’s using it in federal district court as I write this. Powell was added to Donald

Trump’s legal team to advance the legal claim that he actually won the 2020 U.S. presidential election. One of Powell’s bizarre election fraud theories was that Dominion Voting Systems rigged their voting machines to allow Biden to win the popular vote. This led Dominion to bring a defamation lawsuit against her, seeking US\$1.6 billion in damages.<sup>15,16</sup> At this writing, Powell has taken a postmodern perspective on reality and truth. In her motion to dismiss the suit, she claims that no “reasonable” person would have believed what she said in the first place.<sup>17</sup> For the tribalist or information warrior, the postmodern perspective may offer the ultimate get-out-of-jail-free card. Yell “fire” in a crowded theater to produce the chaos, and then claim that no reasonable person should have really believed there was a fire in the first place to avoid prosecution. The Sidney Powell defense illustrates just how serviceable fungible truth can be when it flows into nonreality-based belief systems: gospel truth when needed to fire up the crowd and off-hand opinions necessary to advance a motion for dismissal of a lawsuit. It remains to be seen how effective such fluid semantics will be with the courts.

In any event, this is where society ends up when it doesn’t challenge political operatives when they attempt to create their own reality! It remains for us now to see how the Internet and social media help make Humpty Dumpty epistemology work.

## DIGITAL DETOURNEMENT AND CULTURE JAMMING

A primary use of nonreality-based belief systems, together with the attendant fungible truth semantics, is culture jamming in the sense of online terrorism that seeks to tear down social norms. This may take the form of conspiracy theories, hate speech, tribalism, political movements, and so on with the aid of disinformation and illogic.

This is the point at which the disinformation rubber meets the digital highway, because computer and

networking technologies, collectively our online infrastructure, are the perfect fulfillment of the digital sorcerer’s fancy. Without this infrastructure, disinformation and fake news have to be of a one-size-fits-all variety, which diminishes efficiency and effectiveness. Any communication medium that maximizes the potential for culture jamming will definitely be digital.

We begin by comparing our online infrastructure with earlier forms of electronic mass media—especially faux news cable television outlets and AM talk radio. These two media sources have been disseminating propaganda and polarizing audiences for decades, and toward the same end as online disinformation, but for different reasons. AM talk radio became “unfair and unhinged” after Ronald Reagan’s Federal Communications Commission (FCC) abolished the Fairness Doctrine in 1987.<sup>18</sup> Prior to that, the FCC required that broadcasters devote a reasonable amount of time to controversial issues of public importance while ensuring that contrasting viewpoints be presented. Although the Fairness Doctrine was adjudged constitutional by the U.S. Supreme Court in 1969 (*Red Lion Broadcasting v. FCC*<sup>19,20</sup>), the Reagan administration’s FCC still sought to eliminate it. It was effectively dead in 1987.

Televised talking heads propaganda on cable was another story altogether. Since faux news outlets were spawned by subscription cable and satellite services, which did not broadcast over public airwaves, they were never affected by the Fairness Doctrine. Cable and satellite subscriptions and talk radio have both been politically weaponized but only the latter as a result of the suspension of the Fairness Doctrine.

This takes us to the heart of the matter. What effect did the coming of age of the Internet and social media actually add to the culture jamming motif? As it turns out, the effect was enormous. Collectively, the Internet and social media were sine qua non for culture jamming and veridical exceptionalism.

Traditional broadcast media, and by this I include commercial broadcasting, cable, and satellite services, are fundamentally different in capability from networked media services. In a sense, they're primitive push-phase streaming services with fixed delivery scheduling. But as a streaming service, they lack interactivity and are only weakly participatory. There is no way to express oneself to traditional broadcasting because no one is listening. This is not to deny that Netflix, YouTube, and so on have added considerable value over conventional broadcast media information delivery via their asynchronous demand or pull-phase capabilities. But interactive delivery scheduling of streams lacks the potential for dynamic involvement. What is more, cable and satellite services are behind subscription "paywalls," whereas Internet streaming services can, in principle, at least be available to anyone with an Internet connection. With only a little reflection, one can see that the traditional approach to media delivery, streaming in any of its traditional forms, is basically rectified information flow on fixed schedules and that method of delivery has serious limitations when it comes to galvanizing tribes and advancing conspiracy theories.

So what has the Internet, at least the post-common gateway interface World Wide Web part of the Internet, contributed? We can rule some things out immediately. It wasn't speed of information distribution as radio frequency radiation propagates through the air at effectively the same speed as photons in fiber cables. It wasn't the fact that it overcame the tyranny of distance, as broadcast, cable, and satellite systems can also provide global location transparency. It wasn't asynchronous delivery, as pull-phase environments like Netflix provide on demand information delivery. And it wasn't the volume of information as in principle traditional systems have more than enough capability to flood the globe with disinformation. What was it then?

What the internetworked world made possible is a nonrectified, interactive, push-and-pull-phase framework for information sharing that can be tailored to any number of users and coalitions independent of geography, platforms, and service providers. That was the magic that enriched the traditional gatekeepers' propaganda distribution outlets and transformed them into information warfare fortifications for tribes. Esther Dyson is reported to have said, "The Net is terrible at propaganda but it's wonderful at conspiracy."<sup>21</sup> Actually, it's great at both. But she's right—the Net shines when it comes to promulgating conspiracy theories. While these capabilities have been studied by computer scientists and social scientists for a half-century, the ultimate uses to which these capabilities can be put have only started to be appreciated. This is another instance of humanity unleashing technology without anticipating the full range of consequences. In this sense, computer networking is no different than the industrial revolution, atomic physics, the petrochemical industry, big tobacco, the military-industrial complex, and so on.

What the Internet did for the non-reality-based communities is provide the opportunity to efficiently organize tribes (or thought swarms, ideological bubbles, or whatever we choose to call them) by providing a technology that is sufficiently immersive and attentive to attract and hold members while at the same time provide the ability to address each member individually with custom-tailored messaging. This increases the frequency and intensity of cooperative and conflicting interactions. The power of the messaging follows from the math: the number of subtribes or coalitions of  $n$  individuals that can be so addressed is  $(n!)$ . Thus, for  $m$  messages, the total number of possible message combinations that can be addressed to subtribes is  $(n!)(m!)$ . If we add to the numbers of individuals and messages parameters like timings and sequences of messages,

and so on, we produce a combinatorial explosion of possibilities. The only way to effectively deal with this is by means of a reliable connectionless, point-to-point, multimedia-capable, platform-independent, asynchronous digital networking environment (read: Internet). I have elsewhere drawn a parallel between the number of ways that subtribes may be messaged and the ways that they may be abused.<sup>22</sup>

To illustrate, Michael Bender provides the following partial list of the targeted subgroups used by the Trump 2020 presidential campaign: Black voters, Hispanic voters, women, evangelicals, Catholics, Chaldean Catholics, Mormons, Hindu Voices for Trump, veterans, lawyers, truckers, felons, and so on.<sup>23</sup> Furthermore, even this list was found to be too coarse as the campaign saw the need to distinguish Latino voters in Florida from Mexican American voters in the Southwest, and so forth. Needless to say, the most effective messaging will specifically target cohesive coalitions. Modern digital networking is the only technology that exists thus far that makes this practicable.

While broadcasting and streaming send out the same information to all members/subscribers, the Internet through services like email, social media platforms, and the like allows every member (not just coalitions) to receive tailor-made messages. This is the way affinity groups are built and exploited. Each communication endpoint can in principle be targeted by unique hot-button issues, dog whistles, and the like. To illustrate, evangelicals will not react with equal fervor to faith healing and speaking in tongues as Pentecostals, but they might agree on creationism. Therein lies an optimal message granularity. The ability to fine tune messages specifically for individuals and affinity groups is absolutely critical (a sine qua non) for effectively organizing, nurturing, animating, and exploiting tribes.

Personalizing the messaging also sustains the purity of a message. One of the inherent problems in traditional

delivery is that once the information reaches a recipient, inherently unreliable word-of-mouth communication takes over the “last mile” communication distribution. The effect is that the message effect is diluted through retelling. This is easily overcome with the Internet, for digital copies are always identical, no matter how many times they’re reproduced and relayed.

Finally, because Internet connectivity allows for maximum granularity, the potential for apophenia (the tendency to see patterns in things that aren’t really there) is maximized. Apophenia is an inherently personal experience—it is unreasonable to expect large groups to perceive nonexistent connections collectively and contemporaneously. Apophenia defines an inherently bottom-up metaphysics that is mission critical in support of nonreality-based conspiracy theories. The parallel between QAnon and the autists, on the one hand, and the Beatles *White Album* and the Manson family, on the other, cannot be overstated in this regard. Computer networks enable every individual or subgroup to self-select associates who also choose to share perceived imaginary patterns and themes. Prescriptive associations cannot work. The associations have to be self-organized and self-administered along apophenic lines. We may think of this as digital Rorschaching: organizing a large group of netizens on the basis of their particular interpretations of the ink blots—everyone who sees a dragonfly becomes a member of subtribe A, those that see a 1949 Hudson willingly form subtribe B, and so on. Weaponized, digital apophenia is the ultimate, personalized application of the willing suspension of disbelief.

So, if the Internet provides us with the digital infrastructure to maximize tribalism and reinforce our nonreality-based belief systems, what does social media contribute? First, it natively supports multimedia interactivity. Text-oriented messaging is not as effective as a motivational platform as animated visual media (one reason

that radio displaced newspapers and TV displaced radio). The ability to share, modify, and distribute multimedia is the apex of “memecry” that is built into social media platforms. Just think of it: tailor-made deepfakes for every tribe: Donald Trump with underage girls at Comet Ping Pong pizzeria, Nancy Pelosi embracing Proud Boys at rallies. There’s virtually no end to this digital chicanery.

As an aside, social scientists have been studying the deepfake phenomenon since it first appeared a half-dozen years ago. Deepfakes are the heart of what Paris and Donovan call the politics of evidence.<sup>24</sup> While there is no question that deepfakes play an important role in the dissemination of disinformation

isolation. If there are only two people on the planet who subscribe to some weird conspiracy theory, social media allows them to become a bonded, self-organizing, mutually reinforcing thought swarm—with full interactive and participatory interconnectivity. Through social media they become a digital village of their own. What brand of demagoguery and villainy won’t salivate over such power? This would have made Joseph Goebbels puce with envy. What is more, rectified TV messaging is now granulated with addressable (by IP address) cable television. At this writing IP-based cable targeting is offered by Cablevision, DIRECTV, Dish Network, AT&T, Verizon, and Comcast (VOD) to over half of the households in the

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and manipulation of tribes, this role is likely to be reinforcing rather than originating. My hunch is that social scientists will discover that bogus evidence like deepfakes are most effective with pre-identified receptive audiences—e.g., those who have already self-assembled. In any event, there is much to be learned from Paris and Donovan’s presentation of the deepfakes/cheap fakes spectrum. Donovan is correct that social media platforms have a political presence whether they want it or not because of their media content and infrastructure.<sup>25</sup>

Further, the enhanced granularity of networked information exchange encourages individual participation. This participatory environment galvanizes the group—as QAnon puts it “where we go one, we go all” (WWG1WGA). But the key to this galvanization is the ability to fine tune the granularity. This capability overcomes a tyranny of

United States.<sup>26</sup> The inclusion of tribal politics in addressable TV is inevitable.

It goes without saying that filter bubbles are of foundational importance in self-reinforcing nonreality-based belief systems.<sup>27</sup> This was the conceptual framework within which the earliest echo chambers and disinformation campaigns were set. But we’ve moved way beyond that at this point.

Much work remains to explore the social science implications of the phenomena discussed earlier. For example, it remains to be seen whether and to what extent the Zollman effect is relevant.<sup>28</sup> Zollman showed that “Consensus, to be productive, requires that each individual contribute independently out of his experience and insight. When consensus comes under the dominance of conformity the social process is polluted.” Zollman’s research assumes that the better informed consensus is desirable. However, in a

nonreality-based belief system the opposite is the case. The goal is a poorly informed consensus that supports the tribal mantra. At this point it is an open question on which communication models might be optimal for self-reinforcing disinformation.

In nonreality-based belief systems, social solutions do not follow from evidence or facts; they follow from ideologies. This is not a new idea. Scholars from Plato to Martin Heidegger to Michel Foucault (not to mention Stalin and Hitler) have all held this view. Further, disinformation epochs are common. In the last century, some of the more memorable ones involved prohibition, McCarthyism, COINTELPRO, Watergate, the Iran Contra scandal, and the Vietnam war. However, the current disinformation epoch that reached full force in 2016 set the standard for using the Internet and social media to take primitive nationalism and xenophobia to the level of art form.

The future seems pretty clear. The reality detachment suggests an underlying pathology that is shared with other technology abuse such as 911 swatting, GPS spoofing, international mobile subscriber identity catching, phishing, smishing, and hacking and, of course, that full monte of mischief, the dark web. All of these have been featured in this column over the past decade. What remains to be seen is how all of this chicanery gets integrated into the next wave of tribalism. ■

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