

## Contemporary Rhetorical Theories Współczesne teorie retoryczne

8 (4) 2021 EDITORS: AGNIESZKA KAMPKA, MARTA KOBYLSKA

**CARLEIGH DAVIS**

MISSOURI UNIVERSITY OF SCIENCE AND TECHNOLOGY IN ROLLA, MISSOURI, US

<https://orcid.org/0000-0003-4667-4273>

[daviscarl@mst.edu](mailto:daviscarl@mst.edu)

**Memetic rhetorical theory: an analytic model for the spread of information online**

**Memetyczna teoria retoryczna: analityczny model rozpowszechniania informacji online**

### Abstract

Modern discourse is often characterized by such extreme polarization that participants operate from entirely different sets of facts. These *alternative facts* represent a new line of inquiry for rhetoricians, who must determine how false facts gain credibility. This article outlines Memetic Rhetorical Theory (MRT), a model for understanding how information evolves to become credible in a given environment.

Współczesny dyskurs często charakteryzuje się tak skrajną polaryzacją, że jego uczestnicy operują zupełnie innymi zestawami faktów. Te alternatywne fakty stanowią nową linię badawczą dla retoryków, którzy muszą ustalić, w jaki sposób fałszywe fakty zyskują wiarygodność. Niniejszy artykuł przedstawia Memetyczną Teorię Retoryczną (MRT), model pozwalający zrozumieć, w jaki sposób informacje ewoluują, by stać się wiarygodnymi w danym środowisku.

### Key words

Memetic Rhetorical Theory, meme, ethos, alternative facts  
memetyczna teoria retoryczna, mem, fakty alternatywne

### License

This work is licensed under a Creative Commons Attribution 4.0 international (CC BY 4.0). The content of the license is available at <http://creativecommons.org/licenses/by/4.0/>

Received: 15 May 2021 | Accepted: 11 October 2021

DOI: <https://doi.org/10.29107/rr2021.4.2>

**CARLEIGH DAVIS**

MISSOURI UNIVERSITY OF SCIENCE AND TECHNOLOGY IN ROLLA, MISSOURI, US

<https://orcid.org/0000-0003-4667-4273>

daviscarl@mst.edu

# Memetic rhetorical theory: an analytic model for the spread of information online<sup>1</sup>

## 1. Introduction

The 2016 United States Presidential Election was historic for many reasons: it featured the first female presidential candidate to represent a major party in the United States as well as the only victorious candidate in a presidential „election to have no record of public or military service. Perhaps it was the emotional impact of these circumstances that led President-Elect Donald Trump to predict that his inauguration would have an unbelievable, perhaps record-setting turnout” (Nuklos 2017). This claim quickly became a point of contention between the administration and many media sources when the actual numbers were, reportedly, not record-breaking. This debate culminated in a statement made by White House Press Secretary Sean Spicer during a press conference on January 21, 2017, on the day of the inaugural ceremony that the crowd „was the largest audience ever to witness an inauguration – period – both in person and around the globe” (Cillizza 2017). Spicer’s claim was contradicted by most mainstream news outlets, which identified the crowd size as significant but smaller than the first inaugurations of both Barack Obama and Ronald Reagan. In defense of Spicer, Trump administration spokesperson Kellyanne Conway clarified that Spicer had, in fact, not lied. He had simply offered „alternative facts” that presented information counter to the narrative of the mainstream media.

The framing of these alternative facts provided fuel for an ongoing debate about the true size of the crowd. Many mainstream media sources expressed frustration that simply showing an image of the crowd failed to provide a definitive determination of its size, thereby resolving the disagreement (Frostenson 2017; Hunt 2017; Robertson and Farley 2017). The idea that the crowd size was larger than

---

1. This article is drawn from Chapters 1 and 2 of the author’s doctoral dissertation. *Memetic Rhetorical Theory in Technical Communication: Reconstructing Ethos in the Post-Fact Era*, East Carolina University, 2018.

reported was based in an impression that had grown prominent among supporters throughout the Trump campaign that the media manipulate information, including altering photographs, to fit a pre-established, leftist agenda. These allegations of bias, coupled with easy access to other images that appear to show a larger crowd, allowed the images that depict the smaller crowd to be easily dismissed by Trump supporters. Spicer himself claimed that one oft-referenced image in which the crowd looks smaller than that of past inaugurations was framed with the specific intention of minimizing the crowd size (Qiu 2017). This situation is representative of a phenomenon that has been well-noted in academic discourse surrounding alternative facts: that the process of „fact-checking” or simple correction of misconceptions is often not effective (Garrett et al. 2013; Hannak et al. 2014; Lewandowsky et al. 2012), and that those seeking to correct this kind of discourse must engage the cultural situation from which false facts emerge (Cloud 2018).

The inauguration crowd size debacle was the first, but certainly not the last, use of the term *alternative facts* to describe competing spheres of information contributing to social and political discourse in the United States. Similar rhetorical tropes continue to echo through discussions of COVID-19 diagnoses, systemic racism, and alleged voter fraud. In these examples and many more, certain communities, often gathering in online fora, challenge mainstream and expert accounts of current events by relying on alternative sets of facts.

Rhetoric has historically been concerned with the study of truth and persuasion. As such, rhetoricians must ask what it is about alternative (or false) facts that allows them to gain persuasive power. Our traditional understandings of ethos are insufficient for understanding why large groups of people believe in alternative facts, even (or perhaps especially) when those alternative facts are disproved by expert consensus. In such discussions, credibility is created not by the personal attributes and qualifications of the rhetor, which we have long characterized as the locus of ethos, but rather by the confluence of cultural and technological factors that affect the desire and capability of community members to share a piece of information with others.

I suggest that we think of ethos as a characteristic of information constructed by the internal environments that digital communities create through shared rhetorical practices. As a rhetorical conundrum, the rapid spread of misinformation online requires an expanded definition of the concepts of both ethos and agency as they manifest in rhetorical theory. While these concepts are closely related, they are not synonymous, nor do we yet have work that puts them into conversation with one another as a way of more productively understanding digital rhetorics.

This discussion is based in the understanding that communities create, and are defined by, their own internal rhetorics. As such, rhetorics are fluid, adaptive,

and integral to the communities associated with them. It is this characteristic of community rhetorics that allows successful communication, and therefore persuasion, to take place among community members.

### **Ethos: A Brief History**

For the purposes of this project, I define ethos – broadly and simplistically – as the contextual quality of a particular text, individual, or piece of information that allows it to be valued by members of a community to which it is communicated. Rhetorical study has a history of characterizing ethos as a quality of an individual, or as authority derived from an institution. Aristotle characterized ethos as the appearance or performance of credibility in accordance with certain standards of character. James Herrick (2005, 95) points out that these standards of character (competence, good intentions, and empathy) were determined through „careful study of what Athenians consider to be the qualities of a trustworthy individual”. In other words, the rhetor who portrays ethos during his oration draws on an established identity of a credible persona and attempts to mimic that persona in his delivery. Plato, conversely, argued that the goodness inherent in a person, rather than performed by a person as a strategy, was what allowed that person to possess ethos. Regardless of these significant differences, these ancient Greeks (as well as their Roman fellows Quintilian and Cicero) attribute ethos to some connection between the rhetor, his audience, and characteristics that he possesses or performs.

Drawing on the idea of an audience recognizing virtue or goodness in a speaker, and therefore holding that speaker’s words in higher esteem, many rhetoricians continue to interrogate how writers and speakers (as individuals or institutions) might create or perform ethos by drawing on characteristics valued by certain communities (Bizzell 2006; Miller 2004; Pittman 2007; Reynolds 1993; Skinner 2009; Smith 2017) These examinations take into account that ethos, rather than being an inherent characteristic of an individual, is derived from a relationship to one’s culture and community. These culturally situated definitions of ethos are illustrative in the sense that they point to contextual constructions of credibility that happen outside the individual; they refer to a person’s ability (or lack thereof) to fit with a set of cultural expectations that both shape the rhetorical situation and exist independently of that individual. Often they point to communal beliefs or ideologies that dictate what constitutes moral or acceptable behaviors and then discuss relationships between those mandates and the individuals in question. This relationship between cultural ideologies and the individual is important, but it is not the whole picture.

All the definitions of ethos discussed thus far have relied on the ability of an audience to recognize (whether present or performed) certain traits within a speaker or network. However, the unanswered question of how that recognition occurs remains. In the following discussion of agency, scholars demonstrate the power of non-human actors to influence rhetorical practice. It is this influence, exerted by spaces, objects, technologies, systems, and humans alike, that allows for communicative action and therefore the demonstration of the cultural qualities through which ethos is conferred. For example, while Aristotle argues for a performative understanding of ethos, the addition of agency to this definition points to the fact that such a performance is only possible for a rhetor in a context where the audience can observe his body language and hear his voice. As such, the agency of the physical construction of the agora interacted with other cultural elements and practices to place rhetorical value on these characteristics that could be performed by a speaker. A thorough consideration of agency is necessary for productive understanding of how ethos manifests in various communities and, therefore, why those communities bestow credibility in the ways that they do.

### **New Materialism and Rhetorical Agency**

I situate this project among existing New Materialist approaches to rhetorical study, most notably Laurie Gries' (2015) articulation of new materialist rhetoric. In particular, in the examination of factors that influence or affect the dynamics of rhetorical action, it is essential to acknowledge the agency of both human and non-human actors. This characterization is true not only of tangible objects (Herndl 2012; Johnson 1988<sup>2</sup>; Latour 2005), but also of digital actors (Beck 2015; Brock and Shepherd 2016; Edwards and Lang 2018), and socio-cultural power hierarchies (Agboka 2014; Haas 2012; Mohanty 2003; Shelton 2019, among many others). Moreover, in New Materialist approaches this agency is considered not to be an innate or isolated characteristic of these entities, but rather emergent from networks or systems of connected entities acting together (Barad 2007; Edbauer Rice 2005; Gries 2015)

Rhetorics of place tend to emphasize the rhetorical agency of geographic locations in relation to the cultural associations that various groups have with those locations. Places, these scholars argue, hold cultural memory in a way that shapes the communities who interact with them (Bar-Itzhak 1999; Endres, Senda-Cook, and Cozen 2014; hooks 2004). Rhetorics of space focus on the rhetorical power that the physical construction of a location possesses. Scholars who engage

---

2. Actually Bruno Latour, writing under a pseudonym.

with rhetorics of space (Andrews 2017; Dickinson and Ott 2013; Rickert 2013; Soja 1989; Swarts 2007) contend that observable features of a location influence both how people interpret that location and how they interact with each other because of that interpretation. Work that combines rhetorics of place and rhetorics of space (Bray 1997; Wright 2005) invests cultural capital in features of a location and therefore suggests a symbiotic relationship between cultures and the locations in which they develop. Space and place, then, are examples of factors that shape community interactions and therefore rhetorical practices.

The same is true whether the spaces are physical, as in the works discussed above, or digital, as in the fora and social media sites in which digital communities develop. These spaces become invested with cultural influence; their digital makeup becomes the foundation for the communicative practices that define communities. As Beck (2015) demonstrates, cookies and web beacons store user information to customize user experiences online, allowing algorithms to adapt certain content on digital sites to suit users. Technological interfaces play a powerful role in shaping online discourse for precisely this reason. The personalized algorithms built into digital technologies provide an unusually powerful filtration system that helps to create highly polarized communities wherein communicative norms are established by the combination of site features and commonalities in tagging criteria that filter users to those sites. Pariser (2011) calls this phenomenon a „filter bubble” and points to the lasting impact that it has in closing users off from diversified information sources.

### **Memetic Rhetorical Theory (MRT)**

Taken together, these understandings of ethos and agency suggest that there must be a system of interactions and a confluence of material and immaterial factors that determine how and why communities become invested in certain kinds of information. Rather than relying on established patterns of institutionally conferred expertise or academic research, most communities look for and recognize responsive manifestations of credibility that are rooted in the communicative practices by which they characterize themselves.

To connect New Materialist rhetoric with the evolving personalized information environments characteristic of the spread of alternative facts and accompanying re-conception of ethos, I offer a theoretical framework, Memetic Rhetorical Theory (MRT), which is an evolutionary model of analysis for recognizing how certain pieces of information become persuasive in different environments. MRT also provides a model for understanding rhetorical systems and emphasizes the successful spread of cultural elements through coadaptation, seeking to understand

how a variety of factors, from socially systemic influences to features of specific technologies, evolve together to form the distinctive rhetorics that determine the success or failure of communication in a particular scenario. MRT considers that a community is more likely to be persuaded by an idea that adapts easily to the core beliefs of that community, to the rhetorical practices that its members use to communicate with one another, and to the technologies that facilitate that communication.

As an evolutionary model, MRT relies on the understanding that the rhetorical environments created by intersecting networks of agentic actors not only exist and exert influence, they also are continually growing and changing. The information transmitted within these environments must likewise grow and change to adapt successfully to its surroundings, thereby effecting successful communication and rhetorical action. This changeability of communication is reminiscent of Jim Ridolfo and Danielle N. De Voss' (2009) concept of rhetorical velocity as well as Lawrence Lessig's (2008) remix, with one crucial difference: MRT expands on these concepts by asserting that ideas spread and evolve in response to the environments into which they are introduced, not only as the result of conscious changes made by human (re)writers. In the development of Memetic Rhetorical Theory, I build on the work of these scholars by focusing on the ways in which combinations of technological, material, social, and rhetorical factors come together to create environments that determine how ethos is constructed in the communities within those environments. This model relies on the understanding of change over time and through transmission, like rhetorical velocity, but moves toward an understanding of this change as environmentally responsive, building on the model presented by Gries (2015), rather than solely as the result of conscious changes made by composers.

## Memetics

Memetics is a distinct field of study focusing on the evolution of culture through the transfer of ideas, information, or communicative activities. The origins of this field lie in Richard Dawkins' 1976 book *The Selfish Gene*, although the study and application of memetics have evolved significantly from this foundation. Because rhetoric is a cultural phenomenon, and indeed because rhetorics are what define the boundaries of culture itself, the model of cultural transmission offered by memetics is illustrative for rhetoricians. Memetics offers a mechanism for understanding the relationships between the cultural, technological, and environmental factors that shape work in rhetoric; it is a way of putting the various factors that determine rhetorical success in conversation with one another to better understand and

intervene in those processes. This understanding relies on attention paid to the network of agentic actors that create this cultural and rhetorical environment.

The field of memetics begins with the definition of the meme itself. This definition, of course, relies on an understanding of the term *meme* outside of the usual colloquial usage. This colloquial usage understands a meme as a particular communicative genre consisting of image/word pairings on the internet. Most people recognize this term as referring to an image, usually shared through social media, with an ironic or humorous caption overlaying the picture although it can refer to audio clips, gifs, and other representative forms as well. The theoretical definition of the term meme as it applies in this project goes well beyond this isolated genre. It is therefore helpful, from this point forward, to disassociate the term meme from this genre, specifically, and instead think of it in the theoretical terms that follow.

When Dawkins (1976) first introduced the term meme, he was looking for a way to define what he called „the basic unit of cultural transmission” and he wanted a term that would invoke both the idea of imitation, which he considered central to the replication of cultural elements, and the idea of evolution, which was his model for how these elements grow and change together. Thus, he combined the words *mimesis*, from the Greek word meaning „to imitate”, and *gene*, as in the primary building block of genetic evolution, to create the word meme.

To develop Memetic Rhetorical Theory, I start with a new definition of the meme that is applicable to rhetorical study<sup>3</sup>, which differs only slightly from the definitions offered by memeticists in the past. This similarity is due in large part to the common goals among rhetoricians and memeticists; we all are hoping to understand how and why successful communication happens. A *meme* in memetics and MRT is both a theoretical concept and an agentic actor that functions as a unit of communication. As such, I rely heavily on Dawkins’ original definition of a meme (also used by Blackmore (1999) and others) as any feature of communicative interaction that replicates (that is, is used or appears more than once) and that, by virtue of its presence, exerts influence over the content and outcome of an interaction. However, I distinguish my definition from that of both Dawkins and Blackmore with the addition of non-human actors as agents of communication. Using this understanding, examples of memes interface features, environmental factors, sounds, images, features of images or any other discrete element related to communication that may or may not rely solely on human beings for transmission. As such, I define any unit of rhetorical action as a meme.

---

3. This is not the first attempt to bring memetics into rhetoric or communication studies. In particular, Shifman (2013, 2014) has offered applications of the meme concepts to the study of digital culture. However, I am not drawing on Shifman’s definitions of the meme concept here, as these both associate too heavily with the idea of internet meme-as-genre for my purposes and analytically distinguish between form, content, and function, which is an association I deliberately avoid in this model.



Memes, according to this definition, are units of rhetorical action in the sense that if they are successful, they evolve and spread enough to possess agency in the rhetorical situation. That is to say, they are the primary building blocks of the environments that determine the success of any new or existing rhetorical action; they exert influence in this way. In order to succeed, any new memes (new elements of rhetorical action) must respond to those that are already present. This is a manifestation of ethos that does not rely exclusively on a set of predefined characteristics, but rather on the confluence of factors that create rhetorical environments, as indicated by New Materialist approaches to rhetoric (Rice 2005; Gries 2015).

I choose to abandon the term *imitation* in MRT because the connotations of conscious choice associated with this term are, for me, too strong to be overlooked and therefore likely to cause theoretical misunderstandings. Instead, MRT relies on the premise of *replication* of memes. Rather than defining *replication* as the process of creating identical copies of the meme, which has been a pitfall of memetics in the past (see Sperber 2000 among others), I define this term in MRT as meaning that a form of the meme has been reproduced that relies on a subset of the physical, sensory (i.e., visual, auditory, haptic, etc.), ideological, technological, or rhetorical features of the original meme. In other words, *replication* in this construction includes in its definition memes that have transformed through transmission or been deliberately remixed.

A productive study of memes should never consider them in isolation. In her book *The Meme Machine*, Susan Blackmore (1999) coined the term „memeplexes” as a shorthand for the more cumbersome „co-adapted meme complexes”. These are groups of memes that evolve together over time, building on each other’s successes and creating frames of reference that determine the survival rate of new memes that emerge near them. As such, memeplexes are characterized by the internal compatibility of the memes that they contain; they complement one another but are not identical. It is this compatibility that allows memeplexes to act as both gatekeeping mechanisms and mutually constructive forces for emerging memes. Complex sets of memes that create the parameters of a rhetorical situation can therefore be understood as memeplexes. These might include culturally constitutive ideas, but they might also take the form of images comprised of recognizable traits (as in Gries’ 2015 *Still Life with Rhetoric*), specific phrases, or digital interfaces that shape user interactions. New memes are only able to survive in memeplexes with which they share characteristics that contribute to that internal compatibility. Any memes that do not possess these characteristics have no way of relating to the environment and therefore die out quickly, if they replicate at all.

This co-adaptive characteristic of memeplexes points to a new, memetically-informed definition of ethos. The literature discussed previously in this article defines ethos as contextually constructed value or credibility; MRT provides a model for understanding how that construction happens. Because memeplexes act as both building blocks and gatekeeping mechanisms to the introduction of new memes, it is the ability of a newly introduced meme to adapt to those memeplexes that determines whether or not it spreads. Memeplexes, then, are the contextual factors that construct value and co-adaptation is the mechanism by which they do so. This co-adaptive characteristic is key to understanding why memes spread and, therefore, how information becomes persuasive in a given set of circumstances. In other words, this co-adaptive characteristic is the feature that allows a meme to cultivate ethos in a given situation. The more a meme spreads, the greater its ability to influence a given memeplex and affect the spread of other memes becomes, and so the more rhetorical agency it has. The more rhetorical agency it has, the greater its ability to cultivate and maintain credibility, ethos, within the system becomes. The same process applies to memeplexes on a larger scale.

Memeplexes, like the memes that constitute them, co-evolve to create larger, interrelated communities. I call these communities *memetic ecologies* because they are the environments created from memes, and into which memes enter. *Memetic ecology* is a term that has been in use by memeticists for many years (James 2010; Lynch 1996), though its definition often fluctuates between extremely narrow (more akin to Blackmore's *memeplex*) or broad enough to encompass the entirety of human thought throughout history. Here I choose a middling definition which characterizes a *memetic ecology* as a co-adapted group of memeplexes. This definition draws both Edbauer Rice's (2005) and Gries' (2015) characterizations of rhetorical ecologies into the memetic model. A memetic ecology can be massive, like the political landscape of the United States, or much smaller, like the interactive page operated by a particular group on Facebook or a community of people using the same Twitter hashtag. These memetic ecologies are defined by the memeplexes that make up their core features and values.

Following the terminology established in the field of memetics, I call the spread of a particular meme or memeplex through a memetic ecology *memetic proliferation*. This term has roots in biology (think „cell proliferation”), but also works well because of its colloquial association with rapid increase in numbers, which characterizes the way that memes come to influence a memetic ecology, especially in digital environments. Memes that proliferate enough to become lasting features of an ecology can be termed „successful”. Conversely, memes that die out quickly and fail to impact other memes within the ecology are failures. It is important to note that the proliferation of the meme is the only factor that

characterizes its success or failure (Brodie 2009). As such, success and failure are not, and never can be, value judgements in MRT.

Because of the co-evolutionary nature of memetic ecologies, and the interconnected patterns that their constituent memeplexes create, it is nearly impossible to immediately dislodge an entrenched meme or memeplex from its established environment. The memeplexes that form a given ecology rely on one another, creating a system of mutual support that is largely self-sustaining. This is what makes it so difficult to disrupt or disprove patterns and ideas that have already spread within a community; they become so intertwined with other patterns and ideas that removing one meme or memeplex would require the disruption of tens or hundreds of other memes and memeplexes.

MRT provides a useful framework for articulating the ways that agency distributed among content and interface memes in a memetic ecology determines ethos by either allowing or suppressing the proliferation of a newly introduced meme. This framework allows rhetoricians to more effectively interrogate how and why information, including misinformation, is invested with ethos in a given ecology, and to use that knowledge to craft more potentially successful interventions based on similar processes.

### **Memetic Rhetorical Theory in Action: A Brief Case Study**

Let us return now to the original question of alternative facts and their discursive introduction surrounding the inaugural crowd size of President Donald Trump. In the following paragraphs, I will use this contentious discussion – and specifically the spread of the larger crowd-size (LCS) meme – to illustrate the creation of ethos through co-adaptation within the existing memetic ecology.

First, let us consider the ecology of the United States' 2016 presidential election climate, particularly in those online communities dominated by Trump supporters (a unique memetic ecology), and the memeplexes that characterized it. Within this ecology, the following memeplexes stand out: 1) an active distrust of establishment entities by Trump base supporters; 2) real and identifiable dislike of Trump by many mainstream Republicans as well as politicians and voters on the political left; 3) a movement away from expectations of civil or mutually respectful discourse; 4) a reliance on increasingly polarized internet news sources, both from social media and from established news outlets; 5) the use of social media technology itself, and the accompanying reliance on image-based communication and personalization of available information. For the LCS meme to successfully proliferate in this ecology – that is, for it to develop ethos – it needed to be well-adapted to the environmental conditions created by at least one of these memeplexes. In this

particular case, the LCS meme was ideally suited to several of them, allowing it to proliferate that much more effectively.

The LCS meme directly contradicts an opposing meme proliferating at the same time in adjacent ecologies – the idea of a smaller, but still substantial crowd size (SCS). The SCS meme was put forth and supported by other memes (statements, images, and data points) from markedly establishment-oriented entities, namely mainstream (often left-leaning) news outlets and transit authorities in Washington D.C.. The very fact that the LCS meme ran counter to the SCS meme made it well-adapted to the distrust of establishment entities memeplex, allowing it to proliferate by building upon the understood acceptance of that memeplex in this ecology.

Likewise, the LCS meme was well-suited to the acknowledged and accepted dislike of Trump and the movement away from civil discourse. Immediately following the election, tensions remained high and the expectation among many voters was that those who disliked Trump would work hard to belittle and discredit any of his accomplishments as a result of that dislike; that belittlement would also likely defy the expectations of civil discourse, as these expectations had already gone by the wayside. Participants in this memetic ecology say the SCS meme as fulfillment of these expectations, leaving the LCS meme a clear niche to which it was readily adapted.

Finally, participants in this ecology were already primed to expect contradicting stories to appear on the national stage because of the increased polarization and customization of information memeplexes. As such, the presence of both the LCS and SCS memes in the ecology was not cause for cognitive dissonance, but rather fulfillment of expectations. Furthermore, the heavy reliance on images and personal content in social media communication provided easy access to image memes in support of the LCS meme, which ecology participants were more likely to trust as they were shared by personally recognized sources (friends, family, and self-selected public accounts and news organizations).

Through this adaptation to the memeplexes characteristic of its ecology, the LCS meme proliferated rapidly, gaining ethos that was intrinsic to meme itself and its relationship to the ecology, rather than being derived from a relationship to authorial or institutional credibility. I argue that this evolution of ethos within a memetic ecology is a more accurate characterization of the origins of credibility than one that would invest those origins in an individual, an organization, or even a specific technology, and that this model can and should be applied to understand the spread of information through digital communities.

## References

- Agboka, Godwin Y.** 2014. "Decolonial methodologies: Social justice perspectives in intercultural technical communication research." *Journal of Technical Writing and Communication* 44 (3): 297-327.
- Andrews, Deborah C.** 2017. "A Space for Place in Business Communication Research." *International Journal of Business Communication* 54 (3): 325-336.
- Barad, Karen.** 2007. *Meeting the universe halfway*. Durham and London: Duke University Press.
- Bar-Itzhak, Haya.** 1999. "'The unknown variable hidden underground' and the Zionist idea: Rhetoric of place in an Israeli kibbutz and cultural interpretation." *Journal of American Folklore* 112: 497-513.
- Beck, Estee N.** 2015. "The invisible digital identity: Assemblages in digital networks." *Computers and Composition* 35: 125-140. doi:10.1016/j.compcom.2015.01.005.
- Bizzell, Patricia.** 2006. "Frances Willard, phoebe palmer, and the ethos of the Methodist woman preacher." *Rhetoric Society Quarterly* 36 (4): 377-398.
- Blackmore, Susan J.** 1999. *The meme machine*. Oxford, New York: Oxford University Press.
- Bray, Francesca.** 1997. *Technology and gender: Fabrics of power in late imperial China*. Los Angeles: University of California Press.
- Brock, Kevin and Dawn Shepherd.** 2016. "Understanding how algorithms work persuasively through the procedural enthymeme." *Computers and Composition* 42: 17-27. doi:10.1016/j.compcom.2016.08.007.
- Brodie, Richard.** 2009. *Virus of the mind: The new science of the meme*. Seattle: Hay House, Inc.
- Cillizza, Chris.** 2017. "Sean Spicer held a press conference. He didn't take questions. Or tell the whole truth." *The Washington Post*, January 21.
- Cloud, Dana.** 2018. *Reality Bites: Rhetoric and the Circulation of Truth Claims in U.S. Political Culture*. Columbus: Ohio State University Press.
- Dawkins, Richard.** 1976. *The selfish gene*. New York; Oxford: Oxford University Press.
- Dickinson, Greg, and Brian L. Ott.** 2013. "Neoliberal capitalism, globalization, and lines of flight: Vectors and velocities at the 16th street mall." *Cultural Studies ↔ Critical Methodologies* 13 (6): 529-535. doi:10.1177/1532708613503780.
- Edbauer Rice, Jenny.** 2005. "Unframing models of public distribution: From rhetorical situation to rhetorical ecologies." *Rhetoric Society Quarterly* 35 (4): 5-24.
- Edwards, Dustin, and Heather Lang.** 2018. Entanglements that Matter. In *Circulation, Writing, and Rhetoric*, eds. Laurie E. Gries and Collin Gifford Brooke, 118- 134. Louisville: University Press of Colorado.
- Endres, Danielle, Samantha Senda-Cook, and Brian Cozen.** 2014. "Not just a place to park your car: PARK as spatial argument." *Argumentation and Advocacy* 50 (3): 121-140.
- Frost, Erin A. and Kelly Sharp-Hoskins.** 2017. "Authorial ethos as location: How technical manuals embody authorial ethos without authors." In *Authorship contested: Cultural challenges to the authentic, autonomous author*, eds. Amy E. Robillard and Ron Fortune, 71-88. New York: Routledge.
- Frost, Erin A. and Angela M. Haas.** 2017. "Seeing and knowing the womb: A technofeminist reframing of fetal ultrasound toward a decolonization of our bodies." *Computers and Composition* 43: 88-105. doi:10.1016/j.compcom.2016.11.004.
- Frostenson, Sarah.** 2017. "A crowd scientist says Trump's inauguration attendance was pretty average." *Vox*, January 24.

- Garrett, R. Kelly, Erik C. Nisbet, and Emily K. Lynch.** 2013. "Undermining the corrective effects of media-based political fact checking? The role of contextual cues and naïve theory." *Journal of Communication* 63 (4): 617-637.
- Gries, Laurie.** 2015. *Still life with rhetoric*. Boulder: Utah State University Press, Inc.
- Haas, Angela M.** 2012. "Race, rhetoric, and technology: A case study of decolonial technical communication theory, methodology, and pedagogy." *Journal of Business and Technical Communication* 26 (3): 277-310. doi:10.1177/1050651912439539.
- Hannak, Aniko, Drew Margolin, Brian Keegan, and Ingmar Weber.** 2014. "Get back! You don't know me like that: The social mediation of fact checking interventions in Twitter conversations." *Proceedings of the Eighth International AAAI Conference on Weblogs and Social Media*. Ann Arbor: AAAI Press. <https://www.aaai.org/ocs/index.php/ICWSM/ICWSM14/paper/view/8115>.
- Herndl, Carl G.** 2012. "Rhetoric and the New Materialism." Rhetoric Society of America Conference, Philadelphia, PA, May.
- Herrick, James A.** 2005. *The history and theory of rhetoric: An introduction* (3rd ed.). Boston: Allyn and Beacon.
- hooks, bell.** 2004. "Black vernacular: Architecture as cultural practice." In *Visual rhetoric in a digital world: A critical sourcebook*, ed. Carolyn Handa, 395-400. Boston: Bedford/St. Martin's.
- Hunt, Elle.** 2017. "Trump's inauguration crowd: Sean Spicer's claims versus the evidence." *The Guardian*, January 22.
- James, Craig A.** 2010. *The Religion Virus: Why we believe in God*. Scotts Valley: John Hunt Publishing.
- Johnson, Jim.** 1988. "Mixing Human and Nonhumans Together: The Sociology of a Door-Closer." *Social Problems* 35 (3): 298-310.
- Latour, Bruno.** 2005. *Reassembling the social: An introduction to actor-network-theory*. Oxford: Oxford University Press.
- Lessig, Lawrence.** 2008. *Remix: making art and commerce thrive in the hybrid economy*. New York: Penguin Press.
- Lewandowsky, Stephan, Ullrich K. H. Ecker, Colleen M. Seifert, Norbert Schwarz, and John Cook.** 2012. "Misinformation and its correction: Continued influence and successful debiasing." *Psychological Science in the Public Interest* 13 (3): 106-131.
- Lynch, Aaron.** 2008. *Thought contagion: How belief spreads through society: The new science of memes*. New York: Basic Books.
- Lynch, Alejandro.** 1996. "The population memetics of birdsong." In *Ecology and Evolution of Acoustic Communication in Birds*, eds. Donald E. Kroodsma and Edward H. Miller, 181-197. Ithaca: Cornell University Press.
- Miller, Carolyn.** 2004. "Expertise and Agency: Transformations of Ethos in Human-Computer Interaction." In *The Ethos of Rhetoric*, ed. Michael Hyde, 197-218. Columbia: University of South Carolina Press.
- Mohanty, Chandra T.** 2003. "'Under western eyes' revisited: Feminist solidarity through anticapitalist struggles." *Signs* 28 (2): 499-535.
- Nuklos, Ben.** 2017. "Inaugural crowds sure to be huge—but how huge?" *The Washington Times*, January 18.
- Pariser, Eli.** 2011. *Filter bubble: What the internet is hiding from you*. New York: Penguin Press.
- Pittman, Coretta.** 2007. "Black women writers and the trouble with ethos: Harriet Jacobs, Billie Holiday, and Sister Souljah." *Rhetoric Society Quarterly* 37 (1): 43-70.
- Qiu, Linda.** 2017. "Donald Trump had biggest inaugural crowd ever? Metrics don't show it." *PolitiFact*, January 21.

- Reynolds, Nedra.** 1993. "Ethos as location: New sites for understanding discursive authority." *Rhetoric Review* 11 (2): 325-338. doi:10.1080/07350199309389009.
- Rickert, Thomas J.** 2013. *Ambient rhetoric: The attunements of rhetorical being*. Pittsburgh: University of Pittsburgh Press.
- Ridolfo, Jim and Danielle N. De Voss.** 2009. "Composing for recomposition: Rhetorical velocity and delivery." *Kairos* 13 (2).
- Robertson, Lori and Robert Farley.** 2017. "The facts on crowd size." *FactCheck.org*, January 23.
- Shelton, Cecilia D.** 2019. *On edge: A techné of marginality*. Greenville: East Carolina University.
- Shifman, Limor.** 2014. *Memes in digital culture*. Cambridge: MIT press.
- Shifman, Limor.** 2013. "Memes in a digital world: Reconciling with a conceptual troublemaker." *Journal of computer-mediated communication* 18 (3): 362-377.
- Skinner, Carolyn.** 2009. "'She will have science': Ethos and audience in Mary Gove's lectures to ladies." *Rhetoric Society Quarterly* 39 (3): 240-259. doi:10.1080/02773940902766730.
- Smith, Julia M.** 2017. "A Gay Girl in Damascus: Multi-vocal Construction and Refutation of Authorial Ethos." In *Authorship contested: Cultural challenges to the authentic, autonomous author*, eds. Amy E. Robillard and Ron Fortune, 21-39. New York: Routledge.
- Soja, Edward W.** 1989. *Postmodern geographies: The reassertion of space in critical social theory*. London: Verso.
- Sperber, Dan.** 2000. "An objection to the memetic approach to culture." In *Darwinizing culture: The status of memetics as a science*, ed. Robert Aunger, 163-173. Oxford: Oxford University Press.
- Swarts, Jason.** 2007. "Mobility and composition: The architecture of coherence in non-places." *Technical Communication Quarterly* 16 (3): 279-309.
- Wright, Elizabethada A.** 2005. "Rhetorical spaces in memorial places: The cemetery as a rhetorical memory place/space." *Rhetoric Society Quarterly* 35 (4): 51-81. doi:10.1080/02773940509391322.