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3

Writing Ecologies, Rhetorical Epidemics,

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"When we are trying to make an idea or attitude or product tip, we're trying to change our audience in some small yet critical respect: we're trying to infect them, sweep them up in an epidemic, convert them from hostility to acceptance."

—Malcolm Gladwell, *The Tipping Point*

ECOLOGICAL EFFECTIVENESS

Ecological approaches to writing have provided important theoretical corrections to our field's rather narrow preoccupations. By viewing writing as embedded in complex social, material, and linguistic ecologies, we are able to move beyond debates over labeling a linear writing process while at the same time grounding the abstract deconstructions of postmodernism in the material world. Yet perhaps the most profound consequences of an ecological perspective are the challenges it presents to our discipline's traditional humanist investments in an autonomous agent and inherited assumptions about communication as a means of controlling the human and nonhuman world. As Marilyn Cooper has concluded from decades of her own groundbreaking work on writing ecologies and complex systems, "writing is not a matter of autonomously intended action on the world" (16). Whereas accepting our lack of autonomy may not be terribly daunting, because most writers will admit that they could not compose without the computers they type on or the texts that informed their ideas, letting go of intentionality is much harder. We assume it not only in our theories but also in our pedagogies every time we remind our students to write with rhetorical purpose. Indeed, regardless of the theoretical nuances we bring to it, we still view rhetoric by and large as an art of social influence that aims to achieve a desired goal. Whether we are "directing the soul" (Plato 537), "inducing cooperation" (Burke 43), or provoking our readers into "*musings* along certain lines" (Vitanza 44), we seek to influence others in some way and we measure the effectiveness of our efforts against the cognitive and/or behavioral changes we see in our audiences. Our field operates on a tacit belief in a direct causal relationship between our rhetorical practice (stimulus) and the change we see in an auditor (response). Such linear causality, however, is untenable from an ecological perspective because ecologies are by definition nonlinear systems in which "small changes can have unforeseen

are always expanding through the mutations and new exposures attached to that given rhetoric, much like a virus" (13, emphasis added).² Edbauer explains that within the viral economy of a rhetorical ecology discourses are not contained by any one situation:

connect various processes, events, and bodies. (14)

Here effectiveness appears to be measured by a rhetoric's ongoing evolution, even as it mutates and no longer resembles any original intention or telos. Rhetoric as an art, therefore, is better understood not as an isolated exercise but "both as a process of distributed emergence and as an ongoing circulation of process" (13). I quote Edbauer at length here because I believe her insight into the viral economy of rhetorical ecologies suggests the framework we need to articulate rhetorical effectiveness from an ecological perspective. However, rather than seeing the viral as merely a convenient analogy, I argue that we directly draw from the conceptual framework underlying the metaphor: the study of epidemic contagion.

Epidemics, after all, are success stories. By definition, an epidemic occurs when a disease spreads through a population "in excess of normal expectancy in a community or region" (Merrill 6). Epidemics are ecological phenomena that emerge from nonlinear relationships as the "unforeseen consequences that ripple far beyond their immediate implications," to borrow Brooke's language again. Of course, the success of an epidemic is viewed negatively because of its consequences for human life, and epidemiologists try to intervene to keep the disease from spreading. Intervention, however, is not simply about targeting the disease-causing agent itself—i.e., the virus—but about altering the conditions that allow it to thrive. What an epidemiological model reveals is that the virus itself cannot lead to an epidemic without participating in just the right set of nonlinear relationships that make up the conditions of a given ecology. Moreover, as Paul Marsden writes, using epidemiological models is not about "making any ontological claims as to the nature or status of what exactly is being spread" but instead helps us account for "the distribution and patterns of the measurable effects of infection" ("Memetics"). Thus epidemiology provides a means of explaining nonlinear success in a complex ecology beyond the biological. With some modification, this model of contagion can explain the spread of ideas and behaviors, which are the success stories of social influence and the kind of stories we typically attribute to a particular writer's intentional

consequences that ripple far beyond their immediate implications" (Brooke 28). Within an ecology, influence is indirect and often unpredictable from any single vantage point within the system itself. Consequently, as Colin Brooke notes in *Lingua Fracta*, "we must begin to rethink notions of rhetorical effectiveness—whether defined in terms of persuasion, identification, or some other activity—because what is 'effective' at one scale or location within an ecology may fall utterly in another context" (28).

Given such contingent uncertainty, then, how do we know when our writing is successful? How can we redefine rhetorical effectiveness without intentionality? To answer these questions, and avoid falling back on faulty rhetorical assumptions, we need to expand eco-theory a bit more. Scholars have primarily used an ecological model to map the physical location and materiality of writing (Dobrin and Weisser, Cooper) as well as define writing as an epiphenomenon of complex systems (Cooper, Syverson). Yet ecological theory tends to focus on the emergence of the text and the act of writing itself, ignoring what happens to determine the effectiveness of that text beyond the moment of composition.³ Only a handful of theorists, not all of whom necessarily identify as eco-theorists, have gone beyond the text to look at the larger life cycle of communication. John Trimbur and Kathleen Blake Yancey, for instance, call for a politico-economic understanding of the location and materiality of writing as part of distinct social systems. Meanwhile, Jim Porter, Jim Ridolfo, and Danielle Nicole DeVoss emphasize the distribution and circulation of online and digital texts that take on a life of their own (Porter 214) and are created intentionally to gain "rhetorical velocity" as they are appropriated by other writers (Ridolfo and DeVoss). Yet these theories don't explicitly map how social influence happens in complex rhetorical ecologies, or interrogate our inherited definitions of communicative success. Indeed, in these latter theories of circulation, recomposition is proposed as a strategy that the author crafts as a potential use of the text (Ridolfo and DeVoss) and the success of its adoption is still attributed to the skills of the original writer and his or her knowledge of online distribution networks (Porter 214). As a result, these theories at least passively reinforce the same assumptions of linear causality, and thus intentional agency, that ecological perspectives otherwise refute.

In order to understand ecological effectiveness, or the relationship between rhetorical practice and social influence, we must therefore seek out a theoretical framework that can explain nonlinear phenomena without assuming intentionality. Thus far Jenny Edbauer has provided the strongest hint at such a framework in her theory of rhetorical ecologies. Following the trajectory of public rhetorics as they are caught up in "a networked space of flows and connections" (9), Edbauer moves beyond the emergence of any single text to account for how messages evolve across contexts, defying the boundaries of traditional atomistic notions of rhetorical situations. Her conclusion is that "rhetorical processes function within a *vital economy*" in which "the intensity, force, and circulatory range of a rhetoric

epidemics"—transformations that come about because conditions are ripe for an idea or behavior to become contagious and gain a disproportionate foothold in a community. To describe these cultural epidemics, then, Gladwell draws from a basic epidemiological model that maps the four interrelated factors that contribute to an outbreak: the virus, hosts, environment, and time.⁴ For instance, in the mid-1990s, there was an epidemic rebirth in the popularity of Hush Puppies loafers (virus) among young urban hipsters (hosts) that began in the counter-culture hotspots of Manhattan (environment) and eventually spread to L.A.'s fashion scene all within a critical span from 1994 to 1995 (time). What Gladwell reveals through such examples, however, is that the epidemic success of a pair of loafers does not reside in their inherent quality, but depends entirely on how all four components together create the conditions for contagiousness and produce that vital but elusive tipping point when an idea takes off beyond all expectation.

By the end, *The Tipping Point* proves to be not the mere biography of an idea but a theoretical argument for how to understand the dynamics of complex social change and, more specifically, how to engage them through different communicative strategies. Although I would not go so far as to say that Gladwell offers a rhetorical theory himself, he emphasizes that the key to these epidemics is communication. "To make sense of social epidemics," he writes, "we must first understand that human communication has its own set of very unusual and counterintuitive rules" (258). For Gladwell, those rules can be understood through the language of epidemic. In fact, Lavin and Russell argue that Gladwell offers a significant contribution to the prevailing imaginary precisely by developing "an epidemiological approach to communication with influence construed in terms of transmission mechanisms, infectious agents, and environmental context, and in which ideas travel through the same logics and networks as disease" (69, emphasis added). In a sense, then, we could read Gladwell as attempting to provide one account of the viral economy Edbauer mentions by exploring how the elements of an ecology—virus, hosts, and environment—converge at just the right time to create a tipping point that will yield exponential change.

However, Gladwell still assumes a degree of intentionality. Indeed, *The Tipping Point* is more or less Gladwell's attempt to identify those unlikely factors that "tip" an idea or message from being unknown to becoming pervasive in a community because he believes that if we can harness the right conditions we can "deliberately start and control positive epidemics of our own" (14). Thus, even though he admits that social contagion is not "rational or even necessarily conscious" and thus cannot be viewed "like a persuasive argument" (223), Gladwell is still clearly invested in how to exploit these nonlinear dynamics and reach tipping points in order to precipitate desired change. Unfortunately, such faith in intentional control both fails to provide a truly ecological perspective and is simply not supported by the data on social contagion as a means of diffusing new ideas.

act. My contention is that an explicit epidemiological theory of rhetorical practices necessarily supplements ecological theories of communication and can help us account for rhetorical effectiveness in network culture once we have abandoned the notion of intentional agency.

INVOKING THE VIRAL

Over the last two decades, the language of epidemiology has become part of the vernacular for describing everything from the inane viral circulation of YouTube videos featuring kittens to the recent tragic epidemic of suicides among teens bullied about their sexual orientation. Indeed, according to political scientists Chad Lavin and Chris Russell, such language appears to be symptomatic of living in twenty-first-century network culture. In "The Ideology of the Epidemic," they argue that "the ubiquity of the terms and tropes of epidemiology in popular culture and social science are part of what Charles Taylor calls a 'social imaginary,' a series of metaphors, images, and stories that societies use to make sense of themselves and their social environments" (66). The epidemiological imaginary, they speculate, has emerged in response to the spatial destabilization and anxiety brought about by the unprecedented intimacy of global economic and communication networks (67). In other words, as our world shrinks and becomes more complex in its connectivity, the more aware we become of the dynamics that influence—or infect—the systems that link us to each other. Moreover, according to Jussi Parikka, the network culture of late capitalism is "marked by transversal infections and parasitical relationships" that are not merely analogous to biological contagions but quite literally operate on "a logic of contagion and repetition" (238). The epidemiological imaginary, then, may be more than just a metaphorical coping mechanism. The logic of the viral—of the condition of *vitality*—functions not only within the literal spread of diseases, like H1N1 or SARS, but also the cultural phenomena that constitute the networked social landscape, such as the spread of "green" thinking or the inane ebb and flow of fashion trends.⁵

One of the most popular distillations of the epidemiological imaginary, and one that Lavin and Russell themselves mention, is Malcolm Gladwell's runaway bestseller, *The Tipping Point*. Drawing on the language of contagion and glosses of various sociological theories, Gladwell presents his book as "the biography of an idea"—the idea that to understand sudden pervasive changes in today's society we need to think of them as epidemics. He begins with a basic premise: "Ideas and products and messages and behaviors spread just like viruses do" (7). Whether we are trying to understand the adoption of a brand of shoes or the decline in violent crime, Gladwell contends that each operates according to complex dynamics we more commonly associate with the outbreak of disease. Thus he refers to everything from passing trends to profound social changes as "cultural

as a necessary function of rhetoric in today's information-saturated culture. Indeed, for both Gladwell and Lanham, rhetoric functions primarily as style and presentation that strives "to invite people to attend to what we would like them to attend to" (Lanham xii-xiii). Rhetoric, however, is more than just a stylistic lens in cultural epidemics.

For a more developed understanding of rhetoric's role, we need to step back and consider the sociological theory of diffusion. Based on various diffusion studies in the first half of the twentieth century, the standard diffusion model of innovations describes how an idea spreads through five key groups over its lifetime: innovators, early adopters, early majority, late majority, and laggards. Everett Rogers, in his seminal book on the subject, emphasizes that these categories are "ideal types" derived from empirical observations of those who participate and their general personality traits (263). Gladwell refers to this diffusion model later in *The Tipping Point* and describes the first two groups as "visionaries" who "want revolution-ary change" (198). Whereas this may be true, the innovators may just be creative experimenters who simply try something new—like wearing Hush Puppies to a club as an ironic fashion statement. The early majority, however, are more tentative and pragmatic, less willing to take risks without a sense of how the innovation will in some way improve their lives.⁶ The biggest leap an idea must make, then, is from the early adopters to the early majority, whose acceptance then makes the innovation not only suddenly popular but eventually normative. Thus this particular leap is the tipping point in the progression of the contagion, when the innovation is suddenly visible and widespread seemingly overnight, just like a biological epidemic. The key to overcoming this gap is communication.

In their critique of diffusion theory, sociologists David Strang and Sarah Soule confirm that to understand the diffusion of ideas, "we must examine communication and influence within the communities where practices diffuse" (270). By looking at cultural bases for diffusion, they suggest that "a self-consciously interpretive process underlies most adoption" and that the goal of this "interpretive process" is to render the practice "salient, familiar, and compelling" (276). Within Rogers's five-stage diffusion model, for instance, the early adopters must *frame* the innovation to make it more legitimate to the skeptical early majority. Thus diffusion occurs when people invested in the spread of the idea rhetorically shape the idea to make it more infectious. Such framing may be similar to Gladwell's understanding of stickiness, or Richard Lanham's view of rhetoric as a means of structuring attention, but it turns out rhetoric's role does not end here.

Indeed, Strang and Soule go one step further in their understanding of rhetorical framing by suggesting that it isn't the practice (e.g., belief or behavior) itself that spreads; instead, the "theorized models and careful framings do" (277). In other words, regardless of content, the *communicable agent* is *actually the message that shapes the practice for potential adopters*. What spreads is the rhetoric. For instance, if we wanted to convince our local

Despite this oversight, however, I do believe that Gladwell's project suggests possibilities for bringing epidemiological concepts more explicitly into our theories of communication and our understanding of what marks success from failure in rhetorical ecologies. In what follows, I borrow elements of Gladwell's cultural epidemics to explore a similar epidemiological approach to rhetorical practice that does not fall back on intentionality to measure effectiveness. Drawing from theories of social contagions and the diffusion of innovations, I suggest that rhetorical effectiveness can only be assigned retroactively, not as a characteristic of the rhetor and her craft but as an emergent property of the conditions made possible by the interaction of virus, environment, and hosts.⁷ Indeed, I conclude that any rhetoric must attend to and cultivate these conditions, rather than seeking to isolate specific strategies for controlling them through craft. Due to the linear constraints of written text, however, we will examine each of the components of the epidemiological model separately and consider its rhetorical implications in the emergence of cultural epidemics. But I ask that readers keep in mind that even as we treat them separately here, these components must be seen as a whole ecological system that generates the conditions for effectiveness and makes it possible to cultivate not just cultural but *rhetorical* epidemics.

VIRUS: RHETORICAL FRAME

We begin with the virus itself because doing so lays the ground work for approaching rhetoric's engagement with the other elements of the epidemic ecology. In biological epidemics, the virus causes the disease that people suffer from but it does not cause the epidemic that sweeps through a population. However, to intervene in epidemics or, conversely, to precipitate them, we must understand the characteristics of a virus that make it more infectious than others. As indicated earlier, in Gladwell's cultural epidemics model, the contagion could be any idea or product or behavior that propagates throughout a community. Yet for an idea to become contagious (given the right conditions) it must be infectious—or as Gladwell would say, it must be "sticky." Stickiness is a quality Gladwell claims is essential to making an idea memorable—"so memorable, in fact, that it can create change, that it can spur someone to action" (92). To illustrate stickiness, Gladwell delves into an extended case study of how children's television programming for *esame Street* and *Blue's Clues* worked through constant revisions, with feedback from kids, in order to identify the specific strategies they needed to use in order to hold the attention—and even educate—their young audiences. One such strategy used by the producers of *Blue's Clues* was to run the same episode five days a week, because children liked to know what was going to happen and to participate in the development of the episode's story (126). Making a message sticky, then, appears to have a lot to do with structuring attention, which Richard Lanham describes

affect humidity levels that sustain a particular viral organism. In social epidemics, environment is just as important in affecting the susceptibility of hosts and propagation of contagions. According to Gladwell, cultural epidemics are "sensitive to the conditions and circumstances of the times and places in which they occur" (139). As an extended example, Gladwell looks at the drop in violent crimes in New York's subways during the early 1990s, which sociologists attribute to changes in the physical condition of the subways—from a crackdown on turnstile jumping to cleaning up graffiti. The radical conclusion of the study is that the opportunistic criminal may not be intrinsically prone to bad behavior but is instead "actually someone acutely sensitive to his environment, who is alert to all kinds of cues, and who is prompted to commit crimes based on his perception of the world around him" (150). When the environmental signs of disorder and lawlessness were corrected, then people weren't as likely to act out in response to that sense of chaos. In other words, environmental contexts help to define expectations of behavior—or at least *perceived* expectations—and can dramatically change the ways in which people process information and thus how they will act as a result. Given our sensitivity to our environments, then, Gladwell concludes that if communicators could make alterations to material contexts, then maybe messages would have a better chance of tipping into success.

Yet the implications of attending to environment as a key component of our rhetorical ecology may be far more radical than just manipulating contextual cues. Notably, Gladwell himself even challenges his readers to consider how "our inner states are the result of our outer circumstances" (152). Moreover, he concludes from the example of subway crime and his summary of Zimbardo's infamous mock prison study that "when we think only in terms of inherent traits and forget the role of situations, we're deceiving ourselves about the real causes of human behavior" (158). Thus we are not only vulnerable to environmental influence, but we are shaped by them as well. Such a view, in turn, forces us to give up our presumptions of inherent dispositions to account for identity and action, which Byron Hawk claims is necessary for "any account of the subject in a contemporary rhetorical theory for technological culture" (189). In fact, both theories of social contagion and complexity contend that human nature is far more fluid and irrational—from a modernist sense—than we commonly assume. As complexity theorists would tell us, there is no such thing as a "fundamental trait" inherent in the subject. Instead, as Mark Taylor explains in *Moment of Complexity*, "The self—if, indeed, this term any longer] makes sense—is a node in a complex network of relations. [. . .] As the shifting site of multiple interfaces, nodular subjectivity not only screens the sea of information in which it is immersed, but is itself a screen displaying what one is and what one is not" (231). The information Taylor is referring to should not be mistaken only for the digital variety circulating online. Our environments are full of information from sense perceptions and physical

community to recycle all used aluminum foil, we have to choose how to frame that activity. Depending on the demographic and economic makeup of our neighborhood, we might frame the recycling of tin foil as an available land issue because of the size of the local dump already. What spreads throughout the neighborhood is not the practice itself, because we are not literally going up to them and making them recycle their tin foil—or support a political candidate or believe in global warming. Furthermore, Strang and Soule acknowledge that these frames transform the practices themselves, such that "none come out of the process unmodified" (277). Such an insight confirms Edbauer's observation about how rhetorics evolve. In our example, the "available land rhetoric" could catch on and influence other behaviors, such as recycling other products or even starting backyard composting barrels. Or, perhaps the frame will be used to advocate a completely different belief, like the need to build a new dump on the other side of town. Although these are not the behaviors we originally intended to produce, and some may even go against our own ideologies, they are consequences of the rhetoric we spread through the community.

The danger, however, is that even as they recognize these insights from an epidemic perspective, writers will simply see themselves as the ones who simply the contagions. Moreover, they will seek out rules for how to do so. The result is that as writers we remain invested in only looking at what we can do to our message and thus overlooking how that message is part of an ecology that is far from stable. Gladwell himself avoids this when talking about stickiness by using an extended example (rather than set strategies) to show how to delve into the complexity of one's rhetorical ecology and be tenacious about revising and rethinking one's rhetorical approach. Indeed, all Gladwell suggests at the end of the chapter is the following: "There is a simple way to package information that, *under the right conditions*, can make it irresistible. All you have to do is find it" (132, emphasis added). The simplicity of rhetorical engineering thus depends on figuring out what those right conditions are before identifying what small design choice will tip the system in a desired direction. Such engineering, however, might require multiple revisions and attempts before the tipping point is found and set in motion. What the writer *must* keep in mind at all times is that those conditions are in flux and so she must engage the dynamics of the rhetorical ecology in/through which she is writing. Not doing so would not only oversimplify communication as a practice but also likely result in rhetorical failure.

ENVIRONMENT: CONSTITUTIVE CONTEXT

Within the epidemiological model, environment typically refers to "those favorable surroundings and conditions external to the human or animal that cause or allow disease transmission" (Merrill 7). Studying environment in biological contagions might mean looking at weather patterns that

maybe mavens), the process is not so simple. Indeed, connectors might be the most critical contributors to a rhetorical epidemic even if they are quite poor salespeople themselves, because the actual constitution of the social network is vital for contagion and thus the emergence of epidemics.

For ideas to spread, for instance, there must be "a trade-off between cohesion within groups and connectivity across them" (Watts 231). Connectors master what in network theory is called a weak tie, a connection between people who don't "know each other that well or have much in common" (Watts 49). These weak ties then connect clusters of strong ties—families, groups of friends, colleagues, etc.—to other clusters that they would otherwise not have access to given the tendency toward insular social grouping. In terms of the diffusion model mentioned earlier, for instance, these connectors might link an early adopter to a cluster of early majority types. Epidemics fail when there is either too much connection (those sharing the idea are all closely tied to each other and not to people outside of their network) or too little (those exposed to the idea look to more people for guidance and thus have a higher threshold before they tip). From an epidemiological standpoint, then, the weak ties embodied in these connectors allow for precisely the kind of unexpected nonlinear jump required to trigger an outbreak. As such, connectors are critical to spreading ideas by forming links among infecteds and those who are susceptible, a point we will cover momentarily.

Yet if we hope to understand socially influenced decision-making, we have to appreciate how the mechanism of social contagion is qualitatively different from that of biological contagion. Watts suggests that the metaphor is fine as long as we recognize its limits and how different social contagion really is (221). In biological contagion, he explains, there is the same probability of infection for each exposure to the virus itself. Yet with a social contagion—like a message or behavior—we are actually more susceptible as more of our peers become infected (224). Watts notes that when we are presented with too much information or face complex problems, we tend to follow the crowd rather than rationalize a decision on our own. In other words, we look to certain people in our social networks as guides for how to navigate the information we're presented, and thus in effect emulate rather than deliberate. Such external influences on our behavior are important, so much so that Watts claims that "to ignore the role of social information in human decision making [. . .] is to misconstrue the process by which we come to do the things we do" (218).

Instead, to understand social contagion we need to pay attention to two interrelated elements of rhetorical ecology: the susceptibility of an individual person to the influence of others (analogous to the threshold models of biological epidemics) as well as—and here's the critical difference—how many people that person turns to for opinions out of their total network. One's threshold of susceptibility refers to an individual's internal—but not stable—disposition toward being influenced by others around them.

objects to discourses and emotions. An individual filters all of this information, and what emerges from that filtering is the person's subjectivity. Although Gladwell suggests that we have a perceived sense of subjective continuity because "most of us are really good at controlling our environment" (163), that control is tentative at best and vulnerable to alterations that could have unexpected effects on us.

Yet that uncertainty is precisely where rhetoric has an opportunity to intervene in ecological conditions, not to curb an epidemic but to start one. To work with environment in the cultivation of an epidemic, rhetoric is not merely a matter of attending to cues from an auditor's physical context but also necessarily becomes part of the environment that shapes the auditor's subjectivity. What we learn from these insights into the constitutive power of environment is that any rhetoric-as-contagion will only spread if it becomes part of the environment in which subjects might emerge. To understand how that emergence happens, and what else besides physical environment plays a role in it, we will now turn to the crux of an epidemic ecology: the influence of our social networks.

HOSTS: INFLUENTIAL NETWORKS

By definition, epidemics cannot happen without people. Even biological outbreaks are ultimately social phenomena because they "work on the social bond and circulate via communication channels of everyday nature" (Parikka 293). To understand an epidemic, then, we need to identify the networks of people who make up a community suffering from an outbreak, and what made them more susceptible than others. In cultural epidemics, people and their relationships to one another are even more vital because these epidemics are largely based on the dynamics of what is commonly referred to as "word-of-mouth." Whether via online communication or face-to-face conversations, word-of-mouth epidemics are a primary means of social contagion and thus social influence. Moreover, word-of-mouth depends entirely on the structure and dynamics of a social network, which economist Duncan Watts describes as "that ubiquitous web of signals and interactions through which the influence of one person passes to another" (220). Indeed, Watts defies the modern rationalist ideal by stressing that "we rarely, if ever, make decisions completely independently or in isolation" (218). Instead, we rely on our social networks, particularly when we are uncertain about a thought or action.

For networks to help propagate epidemics, according to Gladwell, these networks must contain three types of exceptional people: those who provide the social glue within the network (connectors), those who supply the knowledge the people need (mavens), and those who have the skills to persuade others in the network to change (salespeople). Whereas we might be tempted to see rhetoric's role entirely in the efforts of salespeople (and

its success or failure" (243). In other words, these properties would have a more direct impact than they would have if thresholds remained high and peer pressure played a larger role in tipping people. But believing that our craft alone is responsible for that tipping point would be misleading. What we need to keep in mind is that our message is not in isolation and likely overlaps other messages and ideas that our auditor has already been exposed to. Indeed, Dodds and Watts note that models of social contagion commonly overlook the "memory of past exposures to a contagious influence" (1). Thus our auditor may have encountered ideas similar to ours and had yet to reach her threshold of exposures, or to put it differently, she had yet to know enough people who espoused that idea (i.e., infecteds). So, if auditors tip when we make our argument, we cannot say for sure if our carefully constructed rhetoric was essential to their changes of heart. We may have just been the lucky one who helped them reach their tipping point—along with all of the other factors that contributed to that particular moment of social influence.

MEASURE OF SUCCESS

What we learn from studying the dynamics of epidemic is that the success of one message over another is far from a foregone conclusion. Watts warns us that the quality of the stimulus—the message, text, etc.—"is an unreliable predictor of success" and cannot be seen beforehand because success is not inherent in the stimulus but emergent from the network that is influenced by it (250). After all, when do we consider our work effective: when we get our idea to spread, or when our work becomes part of the constitutive environment, or when our auditors are socially susceptible? Rather than trying to isolate any of these as the key to rhetorical success, we need to acknowledge effectiveness as a quality that is retroactively assigned to the ecology as a whole and not to any particular actor or idea within it. According to Watts, the "trick is to focus *not* on the stimulus itself but on the structures of the network that the stimulus hits" (249), for those structures and conditions determine whether an idea can survive and even thrive. Indeed, what we learn from such a perspective, and the necessarily backward understanding of tipping points, is that what is rhetorically effective can be measured only in hindsight—and only by considering the changes we see after the tipping point has passed. The outcome, and thus apparent effectiveness of our rhetoric, can just as easily be attributed to the threshold of the auditor, the environment in which that person encountered in the message, and/or the structure of his own social networks. Therefore, we must not focus so much on altering specific individuals as on cultivating the whole system somehow. Besides lowering individuals' thresholds for social decision-making, maybe we can lessen the amount of people they're connected to, alter the environmental influences that

It amounts to a certain percentage of peers that must adopt a new idea before the individual will likely (although not necessarily) follow suit. For instance, at the risk of dabbling in a bit of math, we might say that person X has an internal threshold of 60%, which means that at least two-thirds of his social group must become adopters of an idea before he will be susceptible to that idea as well. Yet this threshold is not the same across all of the person's social networks (e.g., in clusters of strong ties our thresholds are usually lower), the subjects under consideration (e.g., we have a higher threshold for beliefs that go against our own), and the personality of the individual as well (e.g., whether he is a risk taker or more cautious). Threshold alone, however, does not determine X's likelihood of tipping toward one idea over another. Susceptibility also has to do with the connectivity of his social network. To put it more directly, it matters how many people we pay attention to when making our own decisions, whether deliberately or contagiously. As Watts explains, "The more opinions we solicit in making a decision, the less influenced we are by any *one* of them, and therefore the less impact any single good suggestion is likely to have" (228). In our example of Mr. X, we might imagine that in his social network he looks to a small subset of ten people whose opinions he values or respects. Thus for X to become susceptible to an idea, at least six of these ten people (60%) must change their minds about something before he will likely change his. Together, our threshold predispositions *and* our connectivity to others who have been "infected" contingently determine whether we will succumb to the contagion ourselves. Indeed, Watts seems to suggest that even if two of X's friends are brilliant rhetors, he will not be likely to fold until the magic number of six is reached. Thus our peers are influenced not simply by *how* we share our opinions as much as they are by the fact that we hold those opinions at all. Moreover, no matter how persuasive we might be about our opinion, if most of the people they know don't share that opinion, they may not be swayed. Thus, rather than the charisma and intellect of innovators communicating their ideas, the key to social contagion is the susceptibility of those who encounter those ideas. As Watts and Peter Dodds conclude in their articulation of a generalized model of contagion, "it could be the most easily *influenced* individuals [. . .] who have the greatest impact on the dynamics of contagion" (4). Such an insight turns much classical and modern rhetorical theory on its head, defying the assumption that success is due to the efforts of the rhetor, not the critical susceptibility of the auditor.

Following from these insights, then, rhetoric—as an art of persuasion—would more likely participate in social contagion by altering an individual's threshold to make the person more susceptible to influence. For instance, we might say that an effective rhetoric lowers a person's threshold, making her more susceptible to influence for that particular contagion. Watts himself even suggests that "by altering the adoption thresholds of individuals in the population, the innate properties of an innovation can still affect

4. Gladwell doesn't address time explicitly in *The Tipping Point*, which is an unfortunate omission. But in the examples and case studies he cites, he clearly illustrates how time allows for the "incubation" of cultural contagions and the eventual, although sudden, tipping points he seeks to describe.
5. I will not be addressing time either, because I'm using Gladwell as a guide. But timing in cultural epidemics seems to have mostly to do with timing (kairos) at the tipping point and the slow incubation of minor alterations that precede that point. At most rhetorical practices must allow for incubation and, as always, engage kairos, when the time is right.
6. In Duncan Watts's more mathematical terms, an innovator is the random source of an agitation, whereas an early adopter is a node that becomes activated "under the influence of a single active neighbor" (233). In other words, early adopters tend to have lower susceptibility thresholds, which we will explain later.
7. Duncan Watts points out in *Six Degrees* that Gladwell's theory about connectors will work only in those networks that are poorly connected, such that "highly connected individuals are disproportionately effective in propagating social contagion" (249).

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NOTES

1. Brooke speculates that this tendency to emphasize the text is a consequence of our disciplinary—and I would add, departmental—fixation on textual analysis, such that "frameworks that fail to lend themselves to that activity are simply not going to be especially valuable" (36). For new media in particular, such an oversight ossifies rhetorical practices that are necessarily ongoing as users participate in the evolution of an interactive text. Indeed, Brooke says that to fully understand a rhetoric of new media, "we require a model capable of taking account of not simply the process leading up to a release [of an interface], but the activity that follows as well" (38).
 2. Edbauer mapped this in her article by following the evolution of the "Keep Austin Weird" rhetoric.
 3. Parikka defines "virality" as "a vector of both poison but also force and vitality" (303). The term, however, is not found in any standard English dictionary yet. As of the writing of this chapter, virality was a user-submitted word at Merriam-Webster's website, and is defined there as: "the popularity of something (such as a story or Web page) that is spread quickly and usually by direct recommendations rather than advertisements or news media."
- reinforce their subjectivity, or, as always, craft more compelling contagions. Regardless, we need to keep in mind that the influence we seek to exercise when practicing rhetoric is not entirely within our artistic control. Our rhetorical practices cannot control *how* social influence will play out in response to our messages, let alone determine exactly who will be influenced. Instead, we might benefit more from seeing the act of communication as a catalyst for inciting the social influence that is already flowing through the networks we are seeking to change.
- On the one hand, it might seem a dire fate indeed for rhetoric and writing if we cannot say with certainty that our craft in itself is effective, or that the act of communicating does not, in itself, influence others as directly as we always believed. On the other hand, such a realization could be perceived as a tremendous freedom. Even as we are still responsible for the messages we send, we can find joy in watching them evolve and even play with the unpredictability of the rhetorical ecology itself to see how many different ways we can engage our social networks. In other words, rather than seeing our writing as an end point in our influence on others, or as the finality of our participation in the social world, we can instead see how our messages are actually more protean and a living part of our ecologies. What we want to cultivate, then, is a rhetorical ecology that continually moves toward tipping points, toward opportunities for change. Therefore, rather than resting comfortably on our laurels with our "complete" text in hand, we would instead find ourselves impelled to keep writing, keep communicating, and keep participating in the network we are hoping to change. Because we never know when what we say will take place at just the right time under just the right conditions to tip the world.

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4

Agential Matters

Tumbleweed, Women-Pens, Citizens-Hope,
and Rhetorical Actancy

Laurie Gries

Since the 1980s, *ecology* has gained much capital as a metaphor and a model in the study of rhetoric and writing. *Ecology* is predicated on the belief that biological and social worlds are jointly composed of dynamic networks of organisms and environments that exist on multiple scales and are interdependent, diverse, and responsive to feedback. In simplest terms, networked systems of relations (Benett, Syvertson). In less simple terms, thinking ecologically acknowledges the dynamic complexity of these networked systems, the interrelated, laminated layers of activities that constitute them, and the mutual transformation that occurs among intertwined elements. Within the field of rhetoric and composition, thinking ecologically has pushed the field in many diverse, productive directions. Among some of its most provocative uses, an ecological perspective has helped introduce new models for writing (Cooper); develop new research approaches for composition and genre studies (Syvertson) (Dobrin and Weisser) (Spinuzzi); revise rhetorical theory by challenging our notions of the rhetorical canons (Brooke) (Prior et al.) and the rhetorical situation (Edbauer); and craft new conceptions (Pheps) and histories of the field (Hawk). Alongside this work, scholars have also been challenging us to rethink agency. Rhetorical agency has been traditionally conceived as the capacity for a human rhetor to effect change through persuasive use of language. Or as Marilyn Cooper has recently put it, "we have long understood an agent as one who through conscious intention or free will causes changes in the world" ("Rhetorical Agency" 421). Yet, in the past couple of decades, agency has been reconfigured in response to postmodern critiques of the autonomous, humanist agent; recent developments in social and cognitive sciences; and the emergence of posthuman perspectives. An ecological sensibility toward agency grounds much of this important work.

Especially evident in contemporary theory is the growing awareness that agency is both multidimensional and dispersed among author, audience, technologies, and environment. Marilyn Kohrs-Campbell, for instance, argues that agency is "communal, social, cooperative, and participatory and, simultaneously constituted and constrained by the material and

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