The suicide bomber stands as perhaps the most disturbing symptom of hospitality in networked life. Entering through porous boundaries (no matter how well policed these boundaries might be), the suicide bomber reminds us that the other will arrive by way of doors and interfaces. While the openness of nation-states varies, the ease with which bodies can move through transportation infrastructures ensures that no space can be completely sealed off from the threat of a suicide bomb. But the uncertainty and complexity of networked life can affect the suicide bomber herself too.

On December 31, 2010, a suicide bomb attack was thwarted not by police or intelligence officials but by an unlikely hero—spam. A suicide bomber was killed in a safe house as she prepared for an attack on Moscow’s Red Square during a New Year’s Eve celebration. The bomber in this case was a “black widow,” a term used in Russia to describe female suicide bombers who have lost a relative in battles between Russian and Chechen forces. The woman, believed to have been named Animat and the wife of a jailed extremist, was killed when her suicide belt was set off by “a message from her mobile phone operator wishing her a happy new year.”1 Suicide bombers often use “handlers,” who send text messages to the bomber to detonate explosive devices. In this case, a spam message arrived unexpectedly, while the bomber was preparing for her attack on Manezh Square, an area near Red Square.2 The mishap was thought to be linked to bombings at Moscow’s Domodedovo Airport, which had occurred just two days prior.3 Russia, a country not generally known as a “free” or “open” society, is continually struggling with the complications of hospitality. The question of the other, even in Vladimir Putin’s Russia, which puts extreme restrictions on any form of dissent, is still constantly being negotiated and addressed.

Arriving in the Domodedovo Airport or Red Square or other public spaces, the suicide bomber takes advantage of the hospitable infrastructures of net-
worked life. But this “black widow” perished due to this same structure of hospitality. This bombing is particularly instructive given this book’s discussion of hospitality and software. The bomber’s payload was detonated by a spam message from a cell phone provider. That text message, arriving on her phone through a hospitable network, arrived because she had connected herself to that network and, therefore, had welcomed the message. Though she believed herself to be sheltered in a “safe house,” this message arrived nonetheless. The plan was for the bomber to enter central Moscow, taking advantage of the hospitality afforded to all those celebrating the New Year. Instead, her phone extended a welcome, one that led to her death. Animat fell victim to the hospitality of which she was planning to take advantage, largely because a telecommunications provider employed a computational machine to spam its customers with a holiday greeting.

But in addition to this deadly spam text message, the way that I learned of this news story opens up further questions about hospitality and networked life, questions that Ethical Programs will address by examining pieces of software and the controversies that arise in their wake. Those questions involve how information moves in networks that simultaneously welcome and filter. This news story arrived on my virtual doorstep via TweetDeck, an application that allows me to both read and write 140-character “tweets” via the popular microblogging service Twitter. A colleague, Clay Spinuzzi, tweeted a link to Slashdot, a website that aggregates technology-related news stories (see figure 1).

If a hospitable network means that information can flow relatively easily between nodes (though chapters 2 and 3 will complicate the argument that information flows unfettered from node to node), we require filters to sift and sort that information. As others arrive, we employ ways of determining who or what can or cannot enter. My decision of which Twitter client to use was the first one in a chain of ethical programs, a chain that also includes which Twitter users I follow, Spinuzzi’s curatorial efforts, Slashdot, ZDNet, and The Telegraph. At each stage, software, hardware, and wetware made decisions about the information traversing a hospitable network. At each stage, information is moving through checkpoints and is offered up to human and nonhuman decision-making machines. Each of these machines makes an ethical determination. Each choice implies exclusion and that exclusion is necessary.

Information moves through distributed networks, and Ethical Programs will describe this situation in terms of hospitality. That hospitality is not always about a single host standing at the threshold, welcoming a guest. Further, in case the example of the suicide bomber has not yet made this clear, my characterization of the Internet as hospitable should not be understood in terms of the kindness or generosity that we typically associate with hospitality. Instead, the term describes the ethical difficulties of a network society, one in
Fig. 1. Clay Spinuzzi’s tweet about the black widow suicide bomber. (Clay Spinuzzi, “This Spam Problem Is Really Getting out of Hand http://goo.gl/Dic3n,” microblog, @spinuzzi, [Fri, 28 Jan. 2011 16:16:00 GMT], https://twitter.com/spinuzzi/status/31022730555949057.)

which we are forced to face up to the others that arrive in spaces, digital or otherwise. Ethical Programs examines the spaces established by software, the ethical questions raised by those spaces, and the rhetorical practices that emerge as a response. In this chapter, I explain the key terms that guide my analysis of software in a network society: hospitality and ethical programs. The first comes from the work of Jacques Derrida while the second is my own. Because these two concepts will serve as touchstones throughout this book, I will step through their complications while also explaining how they intersect with concerns of ethics, rhetoric, and software.

Hospitality

Derrida offers a complex and useful account of hospitality, and it is his analysis of the term to which this book responds. For Derrida, hospitality is not only about the choice to extend a welcome. He does discuss this “traditional” notion of hospitality, but he does so in the context of broader ethical questions. For Derrida, the decision to welcome the other is only part of the larger and more complicated realm of hospitality. Explaining that realm will be my task here as I attempt to both lay out the stakes and concerns of Derrida’s meditations on hospitality and connect his philosophical account to software and networked life. As we will see, connecting these two discussions is not much of a leap. Derrida himself saw the Internet (and telecommunications more broadly) as profoundly engaged with the question of hospitality.

For Derrida, any theorization of hospitality begins from a “non-dialectizable antinomy” between what he calls the Law of hospitality and the laws of hospitality. This distinction can perhaps be best understood by considering one’s connection to the Internet. For Derrida, the Law of hospitality—which he also sometimes calls “absolute hospitality”—is that which is offered to an anonymous other, regardless of identity or name. In terms of digital networks, we can consider any network connection to be suggestive of this absolute Law of hospitality. I connect to the Internet, and I invite a multitude of others. I have, in connecting to the network, entered a hospitable space that welcomes many others. And yet, at the very moment that I extend this welcome, I immediately begin to filter arrivals. From firewall software to the users that I block from viewing my Twitter feed, I find ways to sift and sort those that arrive at “my doorstep.” These filters are the laws of hospitality that respond to the Law. These laws are particular responses to particular others, and from the very start they are dependent upon exclusion. The laws of hospitality must always be both hospitable and inhospitable, simultaneously welcoming and excluding.

As the New Year’s Eve suicide bomber learned, attempts to filter are al-
ways imperfect. She had hoped to receive a message from her handler upon arrival at her target, but a spam message leaked through a porous border. Of course, seen from another angle, from the angle of the Russian authorities, this failed filtering system was fortuitous. In any case, the Law of hospitality in a networked society is connectivity, and the laws of hospitality are written in response to this unrelenting fact of connectivity. These laws are rhetorical. They are particular, contingent responses to situations, and they are attempts to make ethical determinations. The laws of hospitality that interest me in this book are those that I call ethical programs, which often come in the form of pieces of software or bits of code that stand at the threshold, raising difficult ethical questions: Who or what gets access to code? How does one ethically address flaws or gaps in software? How are the complex power dynamics of networks coded by software, and how can such code be rewritten? What role does software play in a growing thicket of arguments and narratives? Each of these questions is addressed to the user (or rhetor) in digital environments, meaning that ethical programs can be enacted computationally or by human beings. But the human user of software is not merely making decisions on her own. Rather, each networked rhetorical situation is informed, shaped, enabled, and constrained by, among other things, software.

Regardless of how an ethical program answers the predicament of hospitality, the Law of hospitality, which is absolute and unconditional, remains in place. These “two regimes of law”—the Law and the laws—are forever linked and indebted to one another. There are no laws without the Law, for without the continuous demand of hospitality—in our example, the connection to the network—there would be no need for the laws of hospitality that determine who or what can enter my abode (my computer, my database, my Facebook profile). Conversely, there is no Law without the laws: “[the Law of hospitality] wouldn’t be effectively unconditional . . . if it didn’t have to become effective, concrete, determined.” Without particular instantiations of hospitality (the laws of hospitality), the Law of hospitality would “risk being abstract, utopian, illusory, and so turning over into its opposite.” We write the laws in order to make specific ethical determinations and in order to avoid the irresponsible piety of a pure hospitality, but each of those laws—composed in response to a particular rhetorical situation—is a betrayal. It is a filtering that excludes. Every instantiation of hospitality misses the mark and falls short of the Law, but without these misfires we would lose sight of the ethical demand of the Law of hospitality.

We might be tempted to situate ethics on the side of the Law and rhetoric on the side of the laws. Given traditional understandings of rhetoric, this formulation makes sense. Most traditional understandings of rhetoric, from Aristotle’s (“the faculty of observing in any given case the
available means of persuasion”) to I. A. Richards (“the study of misunderstandings and their remedies”) situate rhetoric on the side of discursive practice. But Diane Davis has convincingly argued that the Law of hospitality also marks a rhetorical imperative. If life in a network society means that the other continues to arrive, this points directly to an exposure that “issues a rhetorical imperative, an obligation to respond that is the condition for symbolic exchange.” The minute “I” am called to respond to some other, to communicate, we are in the realm of rhetoric, and Davis argues that this call is not confined to linguistic representation: “If rhetorical practices work by managing to have an effect on others, then an always prior openness to the other’s affection is its first requirement: the ‘art’ of rhetoric can be effective only among affectable existents, who are by definition something other than distinct individuals or self-determining agents, and whose relations necessarily precede and exceed symbolic intervention.” The Law of hospitality is Davis’s rhetorical imperative, and it calls for laws of hospitality, for “rhetorical reasoning and responsible advocacy.” Rhetoric includes such reasoning and advocacy, but it also extends beyond these practices—the Law of hospitality is rhetorical in that it is addressed and makes demands. This rhetorical imperative makes itself known as soon as we find ourselves enmeshed in networked life, and our answers to it can never completely face up to the Law of hospitality. They can only continue to address that Law regardless of the inevitable misfires.

Before we go any further, we should note that describing networks as hospitable runs the risk of suggesting that everyone has equal access to that network. I am not suggesting this. The digital divide remains with us, in its various forms. Whether that divide is defined in terms of access or skills, its very existence suggests that the network does not welcome all equally. We might also point to debates regarding net neutrality to question the absolute hospitality of the Internet. As network providers and legislators consider the possibilities of tiered network service (service that determines which traffic is more or less important), we are forced to pause when we think of the network in terms of unconditional hospitality. As providers begin to filter traffic, holding some packets at the border while allowing others to pass, the Internet may in fact become less hospitable. However, these attempts to filter are not a refutation of the Internet’s hospitality. They are merely further examples of how organizations and individuals are attempting to write ethical programs, and the fact that computation shapes the lives of those who consciously “connect” to the Internet and those who don’t suggests that the implications of these ethical programs are far reaching. The Internet, in its very structure and in its potential, embodies the two poles of hospitality: absolute, unconditional hospitality and calculating, conditional hospitality. There is no Internet without
an extended invitation, without the Law, but guests must always meet certain conditions in order to traverse the network.

We can return to the case of the black widow suicide bomber to understand this tension between the Law and the laws of hospitality. In the face of the suicide bomber, we could seal off the square, but we would be establishing an ethical program that addresses immediate security concerns at the expense of the unending demand of absolute hospitality. We could eliminate all public space, but this would introduce two problems. First, it would privilege immediate concerns over broader ethical questions, closing down a space that is meant to allow for public gatherings. Second, it would put forth the fiction that the Law of hospitality can be dealt with completely, swept away and ignored. But eliminating public spaces would never completely guard against the arrival of a suicide bomber, a peaceful protestor, or a wanderer passing through town. Most important, what ethical collateral damage would be created by sealing off public spaces?

But in the case of the black widow, we can extend this line of questioning even further, for the hospitality of digital networks was at play as well. The black widow would certainly have preferred to have a say in how and when messages could arrive on her cell phone. She would have liked to institute her own laws of hospitality to determine which messages could arrive. However, the very structure of SMS (short message service) protocol allowed the bomber's cell provider to send a holiday greeting to a large number of customers. In this case, the flexibility and standardization of SMS resulted in an unexpected arrival, which is interesting given how many groups have relied on this same hospitality for political action. As Matthew Fuller demonstrates in *Media Ecologies*, SMS has been used for political ends because of its affordances. Initially seen as little more than a gimmick, it eventually emerged as a cheap and effective tool for political action.\(^\text{10}\) The uptake of SMS is a direct result of the technology's flexible affordances. The reliance on a standard mobile-phone keyboard (which is constrained by fingertip size) and the use of character constraints are just two such affordances, and though they seem obvious to us now such simple affordances make way for users to remake and repurpose technologies:

> These clear but at the same time rather awkward affordances have been taken up in unexpectedly massive quantity and variety because the technology affords further connection to other modalities of life and mediality, which it then also becomes folded into and continues to mesh with and compose.\(^\text{11}\)

Similarly, Okoth Fred Mudhai cites a number of instances of activists using SMS to multiple political ends, from the ousting of President Joseph Estrada
in the Philippines to a “Smoke Belchers” campaign by a Philippine NGO called Bantay Kalikasan (BK), which asked cell phone users to report any vehicle that was emitting black smoke to BK via text message. Mudhai argues that the ability to send messages over mobile networks aids civil society organizations attempting to work with people in areas with little or no access to reliable Internet connections.

These kinds of political actions are indebted to a mobile service that invites innovation by passing simple messages across the network with few filters and with little concern for the identity of senders and receivers. SMS enacts a particular kind of ethical program, and the black widow’s demise was a direct result of this. The predictability of SMS as a service means a certain amount of unpredictability regarding the messages that arrive on a cellular phone. SMS is based on standardized and “stateless” protocols. The standardization of protocols allows digital networks (regardless of provider) to “talk” to one another, and the use of stateless protocols for SMS means that each message is treated as an independent entity. Wikipedia describes a stateless protocol as one that “treats each request as an independent transaction that is unrelated to any previous request so that the communication consists of independent pairs of request and response.” By treating each message as a brand-new relation between two nodes in a network (as a kind of singular conversation between these entities), SMS enacts an ethical program. SMS does not “care” where the message is coming from, how it is related to the sender or receiver, or how it is related to previous messages. SMS welcomes the spam message in the exact same way that it welcomes the order to detonate.

At the behest of the Federal Communications Commission, some telecommunications providers have established filters that prevent spam text messages. While this benefits users pestered by spam, it also enacts a new ethical program for SMS, adding filters to a system that has thrived without them. What effect do such filters have on a technology that has emerged as an effective (if unexpected) tool for social and political engagement? Attempts to filter SMS will undoubtedly result in unforeseen complications (and perhaps even new opportunities for user innovation), but they will, more to our point, make ethical determinations about which packets of information can and cannot move through a network. Putting limits on a protocol or service is necessary and inevitable. Again, the Law of hospitality will always require the laws of hospitality, but those laws will never arrive at a complete solution to the arrival of others. Such a solution would result in cutting off the network, an eradication of the other. This eradication raises functional questions (How could a network be a network if it did not contain this hospitable gesture?) and, perhaps more important, ethical questions about how to design and delineate demarcation points.
Hospitality is the defining ethical predicament of networked life, as it describes the difficulties surrounding “what it is that turns up, what comes our way by e-mail or the Internet.” Life in a networked society means that terms such as place, home, host, and guest are thrown into question. We are confronted with the problems and questions of hospitality by “all those machines that introduce ubiquitous disruption, and the rootlessness of place, the dislocation of the house, the infraction into the home.” The boundary between home and outside is drawn both by the “master of the house” and the other that arrives. Nothing about this situation is simple, for there can be no hospitality without a guest:

And the guest, the invited hostage, becomes the one who invites the one who invites, the master of the host. The guest becomes the host’s host. The guest (hôte) becomes the host (hôte) of the host (hôte) . . . These substitutions make everyone into everyone else’s hostage. Such are the laws of hospitality.

The black widow, as a guest in Red Square, intended to become a host, to transform this public space into her own home if only for an instant, and to kill her guests/hostages. The square is a delimited public space, but it is defined by borders that are porous, as guests arrive on New Year’s Eve. Each guest in this space becomes “the host’s host,” or perhaps even the host of each and every other attendee of this New Year’s celebration. All of these hosts and guests (the same French term, hôte, can be used to describe both) are beholden to one another, vulnerable and exposed, enacting ethical programs in order to navigate the messiness invited by the Law. That exposure extends beyond the space of the square and into digital networks, as demonstrated by the black widow’s spam text message, which arrived as an unexpected guest. The terrorist was terrorized and held hostage by a spammer, who was invited by the Law of hospitality that defines networked life.

The most disorienting aspect of the network’s hospitality is the relationship between inside and outside, a point that Derrida makes by describing state intrusions into “the home.” From wiretapping to censorship of pornography, governmental entities infringe upon the private or, at the very least, draw and redraw the line between the public and the private. While these attempts to censor and track introduce threats to democracy and to public space, they also reveal how the “home” is not only perverted by a network connection but also constituted by it. As soon as a state “gives itself or is recognized as having the right to control, monitor, ban exchanges that those doing the exchanging deem private, but that the State can intercept since these private exchanges cross public space,” then the very terms of the situation of
hospitality are scrambled and “every element of hospitality gets disrupted.”\(^{18}\) These disruptions of hospitality are, for Derrida, more than just violations of the boundaries of the home. In societies that value a separation between the public and private and that value limitations placed upon state interventions, the home would ideally be sealed off from these penetrations and wiretaps. It would be a private space. But Derrida shows that we must now recognize that the home (and here “home” stands in for any number of things and existents, from one’s identity to one’s personal computer or the numerous appliances that are networked) has always been constituted by connectability, by the Law of hospitality, by connections with an outside: “There is no house or interior without a door or windows. The monad of home has to be hospitable in order to be ipse, itself at home, habitable at-home in the relation of the self to itself.”\(^{19}\) The black widow’s mobile device was her “home” on the mobile network, but it was only useful insofar as messages and calls could arrive. Even the detonation of her device required such arrivals. Her mobile home was what she hoped would allow her to enter the public square and perform her protest, but that same home, constituted by the network, was vulnerable to the guests that might turn up at any moment.

This vulnerability means that everything and everyone in a digital network is always hiding in plain sight: “This absolute porosity, this limitless accessibility of technical devices meant for keeping secrets, for encoding and ensuring secrecy, is the law, the law of the law: the more you encode and record in figures, the more you produce of this operational iterability which makes accessible the secret to be protected.”\(^{20}\) While protocols, software, statutes, and norms may attempt to protect these bits of information, the technologies themselves always provide the possibility of cracking the code and tracing information to its source. They always remain exposed to the Law of hospitality, the connectivity of digital networks. In the next two chapters, we will see how this possibility is explored through procedural rhetoric and exploits, both of which rely on the “open secrets” of networked life. Similarly, chapters 4 and 5 extend this question to databases, which continually welcome more data. That data is accessible to the person or machine that has the resources to access it—it is always exposed, vulnerable to the Law of hospitality. The pieces of software that determine who or what can access that information and the software written in order to access it are ethical programs, attempts to write (or, more accurately, rewrite) the laws of hospitality. These attempts to engage the hospitable space of the network are always provisional, and the rhetorical situations examined in this book show that ethical programs often raise more questions than they answer. Software does not solve the predicaments of hospitality, nor does it perfectly determine rhetorical action. Instead, it merely brings difficulties to the surface, asking us to confront morphing
ethical questions. We write and institute laws to deal with “absolute porosity,” but those laws never completely answer the persistent call of a hospitable network, which makes infinite demands.

Ethical Programs

The laws of hospitality are situated in the contingencies of particular situations, and I use the term “ethical programs” to describe these efforts to answer the challenges of hospitality. Ethical programs are processes (sometimes enacted in the form of software, but sometimes not) that determine the shape of networked infrastructures. These programs answer complex and conflicting exigencies, making rhetoric an ideal frame for understanding how they are written and maintained. Given that they are infrastructural—they shape and constrain how or whether writing and communication happen in networked life—it is imperative that we understand how they are constructed and what assumptions are built into them.

These twinned concerns of infrastructure and ethics have shaped a great deal of work in my home field of rhetorical studies, and Ethical Programs emerges from that work. For instance, John Trimbur frames questions of infrastructure in terms of the rhetorical canon of delivery in an influential essay entitled “Composition and the Circulation of Writing.” Arguing that theorists of rhetoric and writing have neglected delivery (which perhaps gets more attention in studies of oratory than it does in studies of writing), Trimbur turns the field’s attention to how the materiality of systems shapes writing. Through a Marxist lens, Trimbur wants to shed light on how “the process of production determines—and distributes—a hierarchy of knowledge and information that is tied to the cultural authorization of expertise, professionalism, and respectability.”21 He argues that teachers and theorists have lost sight of infrastructural concerns, causing them “to miss altogether the complex delivery systems through which writing circulates.”22 Many have responded to this challenge. Rebecca Dingo’s Networking Arguments examines how “global gender policies and initiatives . . . travel, their meanings shift and change depending upon the contexts in which policy makers and development experts use them.”23 Jeff Rice’s Digital Detroit, a text I address in more detail below, takes a similar approach, examining the networks of meaning surrounding the city of Detroit. In each of these cases, the attention to circulation and the delivery of meaning insists upon the complex, discursive relationships one must trace in order to understand contemporary rhetorical ecologies. While my own project might be seen as part of this same citational chain, I’m turning my attention not only to how discourse moves through networks—Rice is focused on how “ideas are spatialized . . .
put into proximity to one another” and Dingo addresses “how meanings shift and change due to context, history, and even intention”—but also to the networks themselves, the computational infrastructures that enable or disable argument, communication, and interaction. In the terms that I use in the concluding chapter, I am interested both in discursive rhetoric (arguing about software) and what we might call computational rhetoric (arguing in and with software). The former accounts for how discourse works, and the latter extends those concerns to the computational infrastructures that prop up or impede that discourse.

These infrastructural concerns are ethical ones, since they actively shape the relational spaces of networked life. If ethics is about relations, as the previous discussion of hospitality suggests, then rhetoric becomes a significant tool for managing those relations. Jim Porter examines such tools in terms of a “rhetorical ethics.” For Porter, ethics is woven through any act of writing in networked life: “Every act of internetworked writing requires ethical questioning. Given this view, ethics is not just a matter of the occasional problematic episode; rather, ethics, like audience, is a factor of every rhetorical act.” Porter argues that the key words of a rhetorical ethics are “maybe” and “it depends,” and his focus is on how network technologies force us to question previous pedagogical commonplaces. But his approach is still useful for my own discussion of networked software platforms, ethics, and rhetoric:

As we open the borders to the writing classroom, our formerly well-established conventions for classroom ethics are disturbed. Now we are in the realm where “our” classroom practices have to be negotiated with campus computing policy, Internet policy, and the diverse contentions of different electronic communities and technologies.

Here, we might take issue with Porter’s assertion that the classroom was ever sealed off from such concerns. As I have argued in the introduction, these questions are not new but are rather heightened by networked environments. Still, Porter’s discussion of borders and ethics is useful for my own discussion of hospitality and computation, and his notion of “rhetorical ethics” is a precursor to what I call ethical programs.

But Ethical Programs enters territory that only gets brief attention in Porter’s Rhetorical Ethics. Like Porter, my interest in ethics is not in definite answers but rather in contingencies and mess. A rhetorical ethics does not offer an answer as to whether a particular practice or technology is unethical, but it does “suggest some strategies to help us decide how to decide.” In addition, my notion of ethical programs is similar in that it’s meant to account for how we author responses to ethical problems in the moment and in response to forces,
pressures, and exigencies. However, Porter is primarily focused on language and writing, and my own approach is an attempt to bring digital rhetorical studies into a discussion of computation as a rhetorical and expressive medium. This is not a massive leap from Porter’s approach. While *Rhetorical Ethics and Internetworked Writing* does not directly address computation, it does remind us that a rhetorical ethics is, like software, procedural. So, while Porter’s concern is primarily with the procedures enacted by writers in response to ethical problems, we can quite easily extend his discussion into the realm of software, which operates by way of computational procedures.

In fact, extending Porter’s discussion in order to account for software allows the rhetorician to approach rhetorical and ethical problems that might otherwise remain obscured. For instance, if we shift our frame to software and computation, an episode that Porter describes as “less interesting ethically” than other episodes, gains depth and texture. He argues that his book is primarily concerned with complex ethical problems and that certain ethical questions are simply answered and “uninteresting.” Porter presents one example of a simple and obviously unethical episode early in the book:

For instance, in 1994, a student at Texas A&M University broke into a professor’s computer account and used it to send racist electronic messages to perhaps 25,000 people (The Chronicle of Higher Education, October 26, 1994, p. A24). Although this case might be interesting for its initial novelty, I contend that it is less interesting ethically. First, the break-in itself is unethical (constituting a computer crime, a clear misuse of computer facilities). Second, the “spamming” of a racist message (i.e., its indiscriminate mass distribution on the networks) is also unethical—although its legal status is less clear.

However, as I will argue in chapter 3, this episode is not so easily dismissed as “unethical.” If we begin to consider software platforms as part of the ethical conversation, rather than as the mere tools that we use to write or communicate, then we can ask different questions about this e-mail hack: What is revealed about the technologies involved (e-mail, in this instance) when we begin to see this hack in terms of the ethics of networked life? Who or what is responsible for this break-in? The hacker? The e-mail system’s security gap? The professor who was sloppy with a password? The author of the password encryption program? Of course, we cannot shift blame completely away from the person who hacked this account, given that he or she broke into a system illegally. However, in a hospitable network that will always welcome such hacks—by welcoming others, by connecting, by opening up a space of relation—these actions are both interesting and within the realm of Porter’s
notion of rhetorical ethics. Responsibility is not so easily assigned in such instances, if we consider that the security of a network is perhaps best understood in moments of breakdown. It is for this reason that many companies invite hacks of their systems and offer rewards for those willing to share the result of these hacks. For instance, a company called HackerOne helps companies better their security systems by facilitating bounty payments to white hat hackers and helping companies to patch the gap.

But even as I am extending Porter’s notion of rhetorical ethics into the realm of computation and bringing it to new rhetorical ecologies (Porter’s text was published in 1998), his discussion of ethics and networked life prefigures my own focus on hospitality, even if only very briefly. During a discussion of LISTSERV technology, Porter discusses the responsibilities of the host:

The “guest-friend” relationship is an important ethic, perhaps the most important, in Greek tragedy: The principle says that as host or hostess you have a sacred duty to protect and care for the Other, the visiting alien. In Greek tragedy, violating this ethic leads to war, death, destruction, and chaos. (Usually only the intervention of the gods, deus ex machina, can restore order.) If we think about such a principle as applied to the management of LISTSERV groups, we can see that it would call the listowner to take on some responsibility, as host or hostess, for those “guests” participating in any particular electronic community.

Here we see the early intimations of my own project, which is concerned with this guest-friend relationship and responsibility. However, my own concerns with hospitality, guests, and hosts would call into question whether the host (the listowner) is the clear locus of responsibility in such a situation. For while the person managing the list clearly serves as the host in some sense, enacting ethical programs to determine who can join the list or e-mail to it, this is but one factor in determining the ethical terrain of a LISTSERV that includes not only list members but also the mailing list software, mail servers, Simple Mail Transfer Protocol (SMTP), Multipurpose Internet Mail Extensions (MIME) protocols, and a host of other computational artifacts that participate in a complex rhetorical ecology. The list manager may be host to those sending e-mails, but she is the guest of protocols and software platforms.

Like Porter, Jeff Rice is concerned with a rhetorical ethics that raises difficult questions and that addresses the complexity of the network with a method that is sufficiently messy. Rice’s Digital Detroit asks how we might build a digital rhetoric for connecting information and constructing new narratives with those connections. In his analysis of Jean-François Lyotard’s discussion of databases in The Postmodern Condition, Rice suggests that “informational prox-
imity should not be used to keep ideas apart, but rather, to allow their connectivty even when those connections come from different bodies (disciplinary, ideological, compositional), often in unanticipated ways.” For Lyotard and for Rice, the procedures by which we make these connections are paramount, and while Lyotard would not necessarily associate these procedures with rhetoric, Rice (and I) would. An ethical program is just this kind of procedure—it is a rhetorico-ethical tool for connecting information and for making ethical determinations. Further, Rice’s book is not only interested in the procedures used for connecting bits of information—he is also concerned with the ethical question of how we decide which connections to make. While critics such as Paul Virilio argue that networks collapse space and time, leading to “incalculable economic and political consequences,” Rice insists that networked life does not necessarily lead to the incalculable. He argues instead that calculation remains in any moment of decision, even if that decision results in the combination of previously separate domains of knowledge: “Boundaries that may have previously kept such categories distinct now merge with one another in complementary and antagonistic ways. In this merger, agency does not vanish. Decisions are made; in the crossing of borders categories break down or expand.” Rice doesn’t mention hospitality explicitly, but the concept is never far away as he discusses border crossings, and it is hovering right around the edges when he cites Marshall McLuhan:

Following McLuhan, one might argue, then, that the age of new media affects the age of decision making. In what McLuhan identifies as a preelectronic state, decisions mostly are made by others; in the electronic age, one plays a more active role in informational decision making so that one works among supposed “others.” “We have,” McLuhan and Fiore note, “become irrevocably involved with, and responsible for each other.”

This responsibility makes decision difficult, since it is never clear with whom or what I am involved at any given moment in a given network. This difficult responsibility leads Rice to theorize the ethics of networked life in terms of the “good-enough,” a mode of decision making that, like Porter’s rhetorical ethics, never aims at being the final answer to the question. One draws lines and makes decisions, but such choices are only ever contingent and temporary:

Good enough may feel like an odd trait of network thinking or even a contradiction given the hype often attributed to new media and networks. Good-enough’s importance, however, results from the complexity of network borderlines, fuzzy areas of connectivity that are not clearly demarcated.
We should not read the “good enough” as a flippant gesture but rather as one that is profoundly rhetorical and contingent. The gesture of good-enough does not aim at resolution, and it does not necessarily follow a “rational” path. In Rice’s words, it is not a “revolutionary” gesture but is rather inventive and contradictory: “Connections may, indeed, contradict one another while also providing me with further information to explore and build from.”38 The good-enough is an ethical metaprogram (perhaps akin to what some programmers might call a “design pattern”) for life in the network. We will see the contradictory nature of ethical programs throughout the coming chapters, from an exploit of Twitter that simultaneously revealed a flaw in the software (something we might deem “ethical”) and caused users to distribute links to pornography (something we might deem “unethical”) to the Obama campaign’s use of software to both centralize and distribute decision making during the 2008 campaign. The ethical program could be thought of in terms of Rice’s good-enough. It is never clearly right or wrong; it merely addresses a given rhetorical ecology in the moment, and it is sometimes (though, not always) rewritten.

Digital Dwellings

If the infrastructural ethics of networked life have been of concern to scholars of digital rhetoric, this is likely because rhetoric has long been tasked, at least since Quintilian, with addressing what it means to act and speak “well.” Ethical Programs turns our attention to software’s rhetoric since it plays such a massive role in our decisions about how (or whether) to relate to one another. If Quintilian was concerned with the good “man” speaking well, then this book urges us to situate any attempt to speak well in terms of the computational infrastructures that shape and constrain speech, writing, and code.39 In order to understand the relationship between ethical decision and software environments, it’s helpful to see ethos as a hinge point. Any attempt to account for ethical action in networked life must account not only for individual choice but also for the digital environments that determine how those choices take shape. For the rhetorician, questions of ethics are always tied directly to these questions of ethos, a concept typically associated with the character of a speaker or writer. The ethical programs enacted by a rhetor are part of ethos, part of how an audience makes sense of a speaker or writer’s character and credibility. One cultivates an ethos by using particular kinds of language, claims, or arguments, and this is what Aristotle would call artistic proofs (sometimes called constructed ethos), since they are crafted with the tools of rhetoric. But a rhetor arrives upon the rhetorical scene with an ethos that is tied to her identity or self, and Aristotle would assign this type of ethos to the
inartistic realm (others would call this the rhetor’s situated ethos), since it is not constructed or crafted by the rhetor.

We will see in chapter 4 how this distinction can fall apart in networked life and how one might construct a situated ethos. However, for the time being I want to draw attention to the idea that ethos can actually have yet another meaning; it need not be confined to the realm of a speaker or writer’s character, the realm of constructed and situated ethos. The term’s roots evoke a certain kind of space or dwelling. Michael Hyde’s anthology The Ethos of Rhetoric returns to what he calls this more “primordial” notion of ethos, one that accounts for dwelling places as well as the rhetorical tactics one uses to cultivate credibility. Whereas much rhetorical criticism focuses on ethos as the moral or ethical character of a speaker or writer, Hyde’s collection examines ethos as the way discourse is used to transform space and time into “dwelling places” (ethos; pl. etha) where people can deliberate about and “know together” (con-scientia) some matter of interest. Such dwelling places define the grounds, the abodes or habitats, where a person’s ethics and moral character take form and develop.

Hyde draws upon Aristotle and Martin Heidegger to rethink ethos in terms of how a rhetorical situation “transforms the spatial and temporal orientation of an audience, its way of being situated or placed in relationship to things and to others.” Whereas notions of ethos that focus on a rhetor’s character are mostly concerned with one’s reputation or one’s effort to identify with an audience, this recognition of ethos as dwelling is concerned with how a rhetor “clears a place in time and space for people to acknowledge and ‘know-together’ (con-scientia) what is arguably the truth of some matter of importance.” This work of clearing does not originate in the rhetor, for while a rhetor might enact an ethical program, that program is always linked to the programs that establish a space or the communities in which they are situated. This dual meaning of ethos demonstrates how ethical programs are always the result of the interplay between rhetor and space, and in computational environments this means that the ethical programs of writers and speakers are always in conversation with those of the software that shapes (and sometimes establishes) that space. This understanding of ethos is very much tied to what Kitchen and Dodge call “coded infrastructures,” which they define as “both networks that link coded objects together and infrastructures that are monitored and regulated, fully or in part, by software.” While they never use the term ethos, their term for computational infrastructures that regulate and shape activity fits well with Hyde’s return to ethos as dwelling, even if Hyde’s discussion ascribes much of the power
to discourse itself. In addition, Kitchen and Dodge’s discussion of wearable computing suggests that the line between ethos as character and ethos as dwelling is often difficult to locate:

The fibers and fabrics of clothes and accessories gain digital functionality, some awareness, and become programmable to a certain degree; they can identify and sense the person wearing them and something of the environment around them; they can potentially communicate with other wearable devices and coded infrastructures; and they can act as interfaces to other devices. As ubiquitous computing begins to code more and more space, our ethos—how we sense others and how others sense us—becomes more and more inextricably linked to the digital dwellings in which we move, work, and play. That these devices can sense and identify us is further evidence that ethical programs cut across the boundary of human/nonhuman.

In her contribution to Hyde’s volume, Carolyn Miller further clarifies this notion of ethos and makes clear that this dwelling is constructed collaboratively by a community:

Those who dwell within a rhetorical community acquire their character as rhetorical participants from it, as it educates and socializes them. The community does this at least in part by supplying the Aristotelian components of ethos—the judgment (phronesis), values (arête), and feelings (eunoia) that make a rhetor persuasive to other members of the community. Thus, a rhetorical community can construct a dwelling, an ethos—writers can be what Hyde calls “rhetorical architects”—in which participants learn how to cultivate their credibility, their ethos. In networked, computational environments, these architects are designers, users, and the computational devices themselves, and this realization forces us to ask: What kinds of dwellings are being built and coded? And how do those dwellings deal with the persistent, nagging Law of hospitality?

In networked life, rhetorical responses to the Law of hospitality happen by way of ethical programs, procedures that expose and address an ethical predicament by addressing arrivals. Software addresses the ethical challenges of the network. But does it offer the flexibility required for the ethical predicaments of hospitality? The laws of hospitality will need to be continually rewritten in order to adequately address the demands of the Law of hospitality, which is unconditional. Can software, with its desire for the discrete and the binary, effectively address this demand? In their preface to Derrida’s On Cosmo-
politainism and Forgiveness, Simon Kritchley and Richard Kearney express a distrust of computation, suggesting that a mechanized ethics would no longer adequately address ethical questions:

On the one hand, pragmatic political action or legal action has to be related to a moment of unconditionality or infinite responsibility if it is not going to be reduced to the prudential demands of the moment. Political action has to be based on a moment of universality that exceeds the pragmatic demands of the specific context. But, on the other hand, such unconditionality cannot, must not, Derrida insists, be permitted to programme political action, where decisions would be algorithmically deduced from incontestable ethical precepts.

While I take up this skepticism regarding algorithms and computation in more detail in chapter 5, I want to emphasize here that this argument is not uncommon among theorists of ethics and hospitality. Emmanuel Levinas also expressed similar concerns about a programmatic approach to ethics, or the “simple subsumption of cases under a general rule, of which a computer is capable.” That these critics discuss ethics using terms such as programs, algorithms, and computation is of the utmost importance for the present discussion. If software helps to code our rhetorical and ethical engagements, then do we run the risk of putting in place an ethical structure that is immovable, that loses sight of the unconditional, that focuses too much on a specific context, and that treats ethical questions as settled? While this is a concern with any kind of ethical infrastructure, a general distrust of computing makes us especially aware that software may code our ethical dwellings in final, inflexible ways. However, this book attempts to demonstrate how computational artifacts are not necessarily as rigid as these theorists suggest. Software is rather one more example of the contingent, mutable laws of hospitality, and it is crucial that scholars from across disciplines examine it if we are to gain a deep and complex understanding of our digital dwellings.

The laws of hospitality will always be enacted differently in different dwellings, and we can return to the discussion that opened this chapter for just one example of this. My own discovery of the “black widow” story came via a Twitter post by Spinuzzi and was thus circumscribed by how Twitter addresses the Law of hospitality. Twitter is an “asymmetric follow” social network. This means that Spinuzzi has a certain number of followers who read and sometimes redistribute his tweets (by way of a “retweet”) but who he does not necessarily follow. In fact, as of October 2014, he had more than 2,000 Twitter followers but was only following 535 people. This asymmetry is different from a social network like Facebook, which typically requires that users
are “friends” before they are able to share information with one another. Facebook has begun to incorporate asymmetric functions into its software, allowing users to “subscribe” to other users. However, the symmetry of “friending” on Facebook remains an important feature of the software and of the social graph that the company continues to build. Different software platforms and different social networks are shaped by how the software imagines relations between users—that is, by different ethical programs.

My choice to follow Spinuzzi on Twitter emerges out of a complex negotiation between the Law and laws of hospitality. I am able to follow nearly any user on Twitter, save those who have decided to “protect” their tweets (these users “approve” followers before sharing with them). Thus, Twitter’s network taps the power of the Law of hospitality, relying on a vast network of users who broadcast 140-character tweets to anyone who cares to listen. In fact, Spinuzzi’s more than 23,000 tweets serve as a reminder of the textual overload welcomed by networked life. And if that sounds like a large number, consider that writer Neil Gaiman had tweeted more than 70,000 times to his two million followers as of September 2014, and this number is dwarfed by many users of Twitter as well as by the vast number of “bot” accounts that computationally generate tweets. Not every tweeter is so prolific, but Twitter’s asymmetrical network does require that users craft their own laws of hospitality to manage the text, image, and sound welcomed by the Law of hospitality.

As a user of Twitter, I enact my own laws as I decide how to navigate this massive network, and these laws are ethical programs. They are open-ended, contingent attempts to deal with the predicament of hospitality. These ethical programs are not necessarily rigidly “programmatic.” They are moveable, changeable, and always open to revision. I choose to follow people based on criteria, including the user’s tweeting patterns, my relationship to the user, or whether I share interests with them. I enact filters in order to determine what does or does not enter the stream of information that I follow each day for news and for information about research in new media studies, rhetoric and writing, and the digital humanities. I even unfollow certain users as circumstances change (too many tweets filling up the timeline, a shift in that user’s tweeting patterns, and so forth). My criteria and these filters can change based on how I choose to use Twitter differently at different times or based on how much information I am capable of consuming. And my ethical programs are different from those of others who use Twitter to follow celebrities or athletes. These users enact their own ethical programs, their own “laws,” in the face of the Law of hospitality.

But in addition to individual users making decisions about how they will write their own laws of hospitality, the choices these social media services make to enact certain types of policies (symmetrical or asymmetrical
networks or choices they make when designing their Application Programming Interface) also rewrite laws of hospitality. Twitter and Facebook make decisions about how information can or cannot be found, and they make determinations about how a particular digital space is shaped. Twitter potentially allows me to reach a broader audience than Facebook, since my tweets are broadcast to the network. Facebook, which is defined by a network of “friends,” makes for a very different audience. When posting a status update to Facebook, I have to consider the audiences that I am addressing, audiences I’ve constructed by choosing to “friend” family members, former high school classmates, and colleagues at other universities. One might be tempted to call Twitter “more hospitable” than Facebook, but such evaluative claims distract from the more important notion that each of these platforms enacts different ethical programs and raises different ethical questions. In addition, these claims would be immediately undercut once the ethical program of the platform shifts. In fact, in September 2014 Twitter announced plans to begin moving toward an algorithmically managed feed that resembles Facebook’s, moving away from a “live stream” and toward a cultivated, crafted stream of information that attempts to make decisions for users. This shift would radically change the ethical program of Twitter, shifting more of the responsibility for filtering information from individual users to the company’s algorithms and no doubt making it easier for advertisers to target certain audiences. The very possibility that this change can be enacted by Twitter means the software’s ethical program can never be essentialized as “open” or “hospitable.” Any ethical program is reprogrammable. Of course, this feed was always procedurally generated; it was always the result of ethical programs, even if those programs were written by users as they made choices about who to follow. However, this change by the company would mean that the ethical programs that one crafts when following users (or muting them, or blocking them) would be coupled with those of Twitter’s computational rules, and users would be working alongside computational machines to determine the shape of this rhetorical ecology.

In the chapters ahead, my primary goal is not to evaluate digital spaces as good or bad, open or closed. Regardless of such evaluations, each platform engages the problem of hospitality in unique ways, simultaneously opening up and foreclosing certain possibilities. In particular, this book addresses how certain software platforms can be understood as ethical programs. The ethical programs I study in subsequent chapters do not answer ethical questions in any final way. If anything, they merely continue to ask questions about the relentless Law of hospitality. Ethical programs are more likely to expose ethical problems and to provisionally answer the difficult ethical questions of life in the network. These programs come in forms—from APIs to con-
tent management systems to software that determines “regular expressions” (regex)—that can only ever provisionally address the Law of hospitality. They continually expose the difficulties of the network: Who or what gets to participate in a given network? How do the entities that collide in networked life address one another? Do they interact with one another at all, or are they separated by barriers? Who or what is writing the laws of hospitality in a particular situation? These are the questions that I address through a close examination of software and networked life.