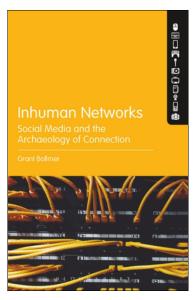Grant Bollmer, **Inhuman Networks: Social Media and the Archaeology of Connection,** New York, NY: Bloomsbury Academic, 2016, 304 pp., $128.00 (hardcover).

Reviewed by
J. J. Sylvia IV
Fitchburg State University, USA

Scholarship surrounding the possibility and constraints of social media and the larger network of the Internet is in flux. Though always subject to a variety of academic critiques, the Internet has largely been celebrated as a democratization of knowledge and sometimes the actual tool that enabled events such as the Arab Spring. However, problematizations of these narratives have increased, along with larger questions about how such technologies can and are being leveraged by alt-right extremists to spread fear and hate. In light of these shifting understandings of both the importance and role of social networks in contemporary society, Grant Bollmer's *Inhuman Networks: Social Media and the Archaeology of Connection* is a well-timed offering. Although it does not delve explicitly into such issues, it offers an in-depth exploration of social media and its role in our processes of subjectivation. Such scholarship can add a layer of depth to the current questions and critiques being raised of social media by grounding such perspectives in their broader theoretical history. This is a strength of the work that helps it stand on its own in the field.

This work offers a media archaeological/genealogical analysis of nodal citizenship, which is defined as a citizen who manages their behavior according to the demands of an ontology-based view of the network. Although this project tackles the topic of social media, it does so broadly, through the framework of French philosopher Michel Foucault's concept of governmentality, in which social media is seen primarily as a form of proper conduct. Bollmer does this by dividing his work into eight chapters covering three distinct parts to the manuscript, moving from the historical narrative of networks and connection to its implementation in contemporary forms of nodal citizenship. Bollmer concludes with critiques of current forms of resistance against the concept of nodal citizenship that he has explored.

The networks discussed herein are inhuman because the author is following Jean-François Lyotard's approach to the inhuman as that which is subject to technocratic systems and controls. Importantly, a nodal citizen is one that "renders itself discursively indistinguishable from technology" (p. 15). Putting together these theoretical pieces, we can see that Bollmer is ultimately constructing a picture of how contemporary networks have come to have a normative power that creates inhuman citizens who are indistinguishable from other forms of technology that are part of the network, such as bots.

Part 1 of the work shines as it follows the threads of historical narratives related to networks and connectivity. Moving deftly through works in anatomy, finance, technology, and social theory, Bollmer traces the evolving understanding and affects related to what it means to be connected. Specifically, he

demonstrates that metaphorical thinking about networks is actually older than telegraphic technology, arising first as a way to think about the flows of the body. Yet, as this metaphor was shifted to the technological domain, it took on a primarily negative affect, often understood in terms of collectivist politics as a threat to liberal, autonomous, individual agents, be they humans or entire states. Further, the invention and widespread use of the telegraph and railroad systems helped popularize a notion of immaterial communication networks, which, when combined with collectivist politics, "enabled anti-Communists and anti-Semites to claim a global conspiracy that was organized yet invisible" (p. 65). Ultimately, some of these problematic conspiracies were integrated into the creation of cybernetics and the Internet.

The Great Depression offers a turning point in thinking about networks more positively, primarily in the form of economic and social theory of networked banks. Whereas debt had previously been seen as a moral failure, it underwent a shift in which it came to be seen as a necessity for capitalist society. This shift had the effect of also elevating networked bank branches over that of local, independent banks that would not be able to ensure the proper flow of capital. Bollmer traces this change through an analysis of Frank Capra's films *American Madness* (1932) and *It's a Wonderful Life* (1946). Though the analysis of these films comes across somewhat long-winded, they are aimed at driving home the growing equivalence of social bonds with economic bonds. These bonds have been read in light of Gabriel Tarde's theory as forging a more positive affect toward networks, though one in which ontology exists only as a form of "social connectivity and informational flows" (p. 86). In other words, everything is reduced to a part of the network, which is understood to constitute the way reality itself actually exists.

Norbert Weiner's version of cybernetics, Bollmer argues, cements this ontological understanding of networks and, further, by elevating the importance of information transmission, erases the distinction between human and machine. Moving toward part 2 of *Inhuman Networks*, Bollmer makes clear that his aim is to ultimately reject this ontological premise of the network as reality. However, the next part of the book follows the way that these early concepts of networks have been embraced by the emergence of nodal citizenship. Bollmer examines the ways that social media writ large have shaped subjectivity, with an emphasis on subjects as citizens within the liberal Western tradition.

In chapter 4, Bollmer uses the television series *Caprica* to argue that the notion of death in the online, networked world plays a role in our processes of subjectivation as nodal citizens. In its simplest form, the argument Bollmer advances here is that we have blurred the line between individuals and their Facebook pages, making it increasingly difficult to grasp the meaning of death, presumably because one's data lives on after death. While the separate life of data from the human is certainly true, this argument seems to ignore the very different offline experiences of death for the family and closest friends of someone who has died. In some ways, this argument is sympathetic. Facebook users certainly have connections to distant acquaintances with whom they would not otherwise maintain contact. On the other hand, it makes some sense that I would experience their death differently than those of my closest friends and family. Thus, while death and its connection to social media is an important topic, Bollmer deals with it relatively unevenly here, primarily so that he can argue that data are becoming more important than physical bodies. But this leaves out the vital question, More important *to whom*? This is clearly truer for some entities, such as Facebook, than others.

The other chapters in part 2 of this book likewise feel unevenly addressed. For example, in referring to the prevalence of CAPTCHA methods as a way of distinguishing humans from bots, Bollmer argues that

> one is not born a human (or worker), but rather becomes one on the Internet through computational means of differentiation that are inevitably and circularly, based on assumptions about intelligence foundational for the same posthuman claims about knowledge that render human and machine interchangeable. (p. 138)

While there is clearly an important discussion here about the role of CAPTCHA and the possibility of bots appearing human (with a heavy nod to Alan Turing), this argument seems to take the conclusion at least one step too far. Similarly, the following chapter presents an interesting overview of the way anonymity on the Internet has shifted away from a celebrated liberty in the early days of blogging to a regulated and problematic possibility that social networking has aimed to eliminate in order to foster greater civility. This is certainly an emerging and, in many ways, problematic trend worth further exploration, but Bollmer again seems to go too far when he argues that

> if there is a new form of "citizenship" emerging alongside social media today, then it is one in which the rights and abilities of the citizen are assumed interchangeable with the circulation, generation and ordering of data, where routers and algorithms are the exemplary citizens of this world of networked flows and connections. (p. 175)

While Bollmer is demonstrating the way that social media privilege data rather than embracing such a view himself, it would still be worthwhile to work through a more nuanced perspective in which citizens are for important reasons still differentiated from routers and algorithms.

Part 3 argues that resistance to these neoliberal forms of networks are actually more rigid forms of neoliberalism than those systems that they are attempting to counteract. This is explained particularly well in the introduction to this section, in which Bollmer explains that such forms of resistance simply encourage forms of disconnection that result in rejecting encounters with others, serving only to reinforce separate and individual neoliberal subjects. This comes to an apex in the final chapter, where Bollmer argues that technological humanism contains a built-in paradox: If technology is simply repeating something (networks) that is ontologically true of all of reality, including human nature, then it cannot offer any new tools or promises that are not already present in nature.

Where does this leave us? This question highlights the greatest weakness of this manuscript. While Bollmer has critiqued both inhuman networks and *other critiques* of inhuman networks, he has offered only offered a few hints of a possible path forward that appear on the very last pages:

> The only way out of nodal citizenship is to discover new forms of collectivity and commonality that can exist without deferral to 'connection'; to prevent or resist the automatism of self-organization without recourse to individualism; to organize in spite of the programmed structures projected by networks and neoliberalism; to reassert the importance of the human without an uncritical, essentialist, liberal humanism; to invent

new citizenship. We need to find a way to relate to each other without networks, without connections, without flows. (pp. 222–223)

Although there is nothing inherently problematic with what Bollmer is suggesting here, it really only serves to say we need something other than what we currently have, with no practical suggestions for what that might look like.

Despite these relatively minor issues in the latter half of the work, Bollmer's scholarship offers a powerful and timely contribution to our understanding of social media and their impact on our own processes of subjectivation, adding a much-needed archaeological and genealogical perspective. This can serve as important context for future scholarship of social media, networks, and connectivity.