Mark Coeckelbergh *New Romantic Cyborgs: Romanticism, Information Technology, and the End of the Machine*. MIT Press 2017. 336 pp. $50.00 USD (Hardcover ISBN 9780262035460).

The question is often asked in humanities classes or philosophy courses that examine the eighteenth or nineteenth centuries, 'which movement has had the most profound impact on our culture today – the Enlightenment or Romanticism'? It is often fun to hear students argue for either the Enlightenment or Romanticism because it is not hard to find evidence for either position in today's intellectual climate. Mark Coeckelbergh, addresses this question as it relates to technology and its effects on culture and society. Coeckelbergh clearly falls into the romantic camp with his book *New Romantic Cyborgs: Romanticism, Information Technology, and the End of the Machine.* Interestingly, a history of Romanticism and how it affects our relationship with technology has not been clearly discussed or defined in the field of philosophy of technology.

Much early philosophy of technology examined the existential implications of technology on the individual and society—Marcuse's *One-Dimensional Man*, Marcel's *Man Against Mass Society*, Barrett's *The Illusion of Technique*—or else focused on the ways that human making is a way of understanding the world and therefore our being and becoming in it. Our contemporary technological mindset, not just the technology itself, has become a metaphysics all its own and has become the driving ontology of our age—consider Heidegger's *Question Concerning Technology*, Jonas's *The Phenomenon of Life*, Grant's *Technology and Justice*. While it is certainly worthwhile to understand what technology is (ontologically or metaphysically) and its effects on the person and society, Coeckelbergh points out the interesting ramifications of romanticism on contemporary culture and technology.

Romanticism is a very difficult term to define precisely because writers such as Rousseau, Keats, Shelly, Wordsworth, and Coleridge often relied on concepts and elements that were not uniquely romantic and even changed their views as they developed and progressed. Nonetheless, in general terms, Coeckelbergh uses a standard understanding of romanticism which begins with Rousseau and includes many nineteenth-century poets and writers who emphasize the imaginative, intuitive, mysterious, exotic, and uncivilized aspects of the human condition against the perceived rational, balanced, logical, ordered, and perhaps totalizing views of the generation that came before them—those of the Enlightenment and Neo-classical period. The idea is that, at least from the romantic view, these Enlightenment ideas of formal rules, logic, and strict empiricism were inhuman and oppressive to genuine human authenticity, creativity, and emotion. In addition, Coeckelbergh takes an additional step to demonstrate that romanticism and the Enlightenment were never really that far apart when it came to science and technology.

Essentially, *New Romantic Cyborgs* presents and defends the idea that romanticism has ultimately won the day in today's technological society. At the same time, however, he provides a critique of the more extreme forms of Romanticism which he believes are not helpful in understanding technology and its role in culture. In Coeckelbergh's view, it is important to find a kind of romanticism that goes beyond a sharply dualistic understanding of reality and technology and at the same time, argues that it is impossible, or at least difficult, to completely escape the romantic world-view. He explains: 'This book explores how people today, albeit unintentionally, try to realize their romantic craving for freedom, self-expression, spirituality, utopia, and authenticity by electronic means and how companies unscrupulously respond to these romantic desires with electronic gadgets that become… romantic technologies' (4). Furthermore, Coeckelbergh phenomenologically examines how people use their devices in ordinary ways, and from that vantage point provides a discussion of the effects of technology on society. For example, when exploring the romantic impulses of the twentieth-century, he states: 'As children of twentieth-century romantic

counterculture, we seamlessly fuse technology and romanticism. Engaging with our many screens and smart gadgets and shielded from the inner, machine-like workings of our devices (developed by science), we try to satisfy our romantic desires and are more like Rousseau, Novalis, or Wordsworth than we think' (4). To support this argument, Coeckelbergh divides *New Romantic Cyborgs* into three parts: 1. Romanticism against the Machine, 2. Romanticism with the Machine, and 3. Beyond Romanticism? Beyond the Machine? Before explaining how one might overcome Romantic thinking, however, Coeckelbergh presents a historical and cultural foundation of romanticism and technology drawing on historians, philosophers, and literary critical theory.

Part One focuses mainly on the perceived dichotomy between Enlightenment rationalism and Romanticism regarding science and technology and provides a cultural and historical foundation. For example, as early as 1818, Mary Shelly warns her readers about the danger of technology going out of control. Similarly, Max Weber (1905) calls modern technology an 'iron cage'. And Heidegger is seen as a Romantic philosopher of technology due to his emphasis of the 'enframing' and the danger technology poses to the individual, as well as his tendency toward German romantic poetry (13). However, the section ends with an argument that romanticism may not have been strictly opposed to technology. Writers such as Mary Shelly, Leo Marx, and Herman Melville (all romantically inspired) also shared a fascination with science and the section closes by suggesting that technology and romanticism might be compatible in some way.

In Part Two, Coeckelbergh questions the opposition between romanticism and technology, humans and machines, culture and materiality (13). The argument is that the romantic relation to technology cannot be reduced to mere opposition (13). For example, 'in the early nineteenth century, romantics were not only fearful of but also fascinated by the new science and technology that delivered magic machines, wonderful scientific phenomena, and mysterious forces such as electricity' (13). Coeckelbergh claims that Kant was haunted by both rationalism and mysticism (13). In addition, Mary Shelly's *Frankenstein* can be interpreted through a gothic-romantic lens which captures both the horror and fascination romantics have with technology—the merging of life with the machine. Romanticism may be more complex than usually perceived and not easily reducible to escapism or antimachine thinking (14). With this foundation, contemporary culture is essentially romantic—beginning with Freud who developed a kind of romantic science of the self, and continuing through the romantic hippie computing era of the 1960s and 1970s which provided the technology for individual freedom, revolution, and love. In this sense, we can understand that in today's technological culture romanticism has merged with technology.

In Part Three, Coeckelbergh provides arguments that are critical of the union of romanticism and technology and examines the views of antiromantics such Babbitt, Berlin, and Popper. He believes that many critiques of romanticism are unfair and romanticism never really did reject reason or rationality as such. Coeckelbergh indicates that the romantics simply wanted to redress a crucial error of the Enlightenment, namely the imbalance between individualism, sentiment, and imagination on one hand and reason, science, and empiricism on the other. (219). While Coeckelbergh holds that the union between romanticism and reason does not finally succeed, he turns to scholars such as Marcuse and Coyne to build an argument that would get beyond romanticism, and have a less dualistic world view. To get beyond the romantic framework, it is important to Coeckelbergh that we change our thinking. Cyberspace, for example is extremely Platonic (Coeckelbergh sees a Platonic impulse in romanticism) and the figure of the cyborg in its postmodern form is still completely romantic (17). To really move away from romanticism, we would have to move beyond modern and Platonic thinking (17). Coeckelbergh explains how this might be done in a couple of ways. First, the Enlightenment-Romantic binary could be overcome through skilled engagement which would decrease the modern romantic 'distance' between science and the individual, and second, he explores modes of what he calls 'nonmodern' thinking. Using Latour and Szerszynski, he

questions the disenchantment myth of romanticism and argues that if we really want to change our thinking into less modern directions, we cannot avoid a discussion of religion and spirituality, broadly understood (18). While it is admirable that Coeckelbergh seeks a more holistic view of nature and technology, including a nonmaterial side to reality, he seems to be very dismissive of Aristotle, the philosopher whose ideas would most likely help him in this goal. If it is true that romanticism seeks the union of essence with material reality, then philosophy of technology should become more Aristotelian, not less. One does not need to be a monist to achieve a holistic view of reality.

One of the strengths of this book is that it is provides a critical process of inquiry and helpful analysis of inherited philosophical orientations regarding the relationship between technology and society. Critical self-reflection is always a good starting point when trying to understand and overcome previous biases and presuppositions. Due to the amazing advances of science and technology in the twentieth and twenty-first centuries, it is easy to overlook the influence of romanticism on society and, in this sense, *New Romantic Cyborgs* presents a solid counterbalance. It is not clear, however, that humans are essentially the same as machines, or that we are all cyborgs.

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