

before and will happen again, offers little solace. The authors fervently wish Butler were here to guide them/us. I suspect that Butler would say, “Carry on, put your head down, do the work, use what power you have.” But never, to borrow another current phrase, let the bastards grind you down.

Humanity: For, you see, that is one of Butler’s lessons, one that several authors, including Alaya Dawn Johnson, Elizabeth Stephens, and Steven Barnes, note. In order to be human, we must find the human in others. Even when that other is a racist and misogynist who brutalized your ancestors (*Kindred* [1979]), or even when that other perpetrated a sexual assault on you (as Johnson reveals in her essay), or even when that racist and misogynist has become the president of the country. Addressing this, Paul Weimer writes that “Survival is an act of *humanity*” (177). We must survive. It’s what we humans do. Even so, Butler reminds us that we have a tendency to place our own tribe ahead of others (354). Instead, we must never lose sight of our shared humanity.

Inspiration: And this, among so many other things, is what inspired so many individuals. Butler lived through a past that marginalized her and dehumanized her, and yet she persisted. Butler gathered data from journals and books and newspapers regarding the atrocities visited upon us all daily, and yet she persisted. In her success and position as an established author, Butler reached out to other authors and fostered them and their craft. As so many here point out, Butler consciously reached back down the ladder to help others, especially those from poorer circumstances. According to these letters, none has forgotten the support, and none has remained unchanged.

In 2007, I wrote in an article for *Utopian Studies* (19.3, 2008) that a veritable cottage industry had emerged around the work of Butler. The output has only accelerated. Of course, when the quantity rises, the quality sometimes becomes uneven. The content here ranges from gushing love letters from former students at Clarion West Writers’ Workshop to academic analyses of Butler’s key themes, from heartfelt thanks to a writer who inspired many writers to angry cries at the current political state of the US. For an academic looking for analysis of Butler’s life and work, all but Rebecca Holden’s piece are available elsewhere. For an academic looking for new details of the author’s life and personality, the encounters with aspiring authors reveal the person behind the novels and stories. For a reader or a fan, these love letters to Butler offer a glimpse into the effect Butler had beyond the written page.

One thing is for certain, however: Octavia Estelle Butler changed all that she touched.—**Ritch Calvin, SUNY Stony Brook**

**Engineering the Liquid Posthuman.** Lars Schmeink. *Biopunk Dystopias: Genetic Engineering, Society, and Science Fiction*. Liverpool: Liverpool UP, LIVERPOOL SCIENCE FICTION TEXTS AND STUDIES, 2016. viii + 272 pp. £75 hc.

“What could be more of a human right than to be able to decide what genes create you?” asks the biohacker Josiah Zayner on his blog (<http://www.ifyoudontknownowyknow.com/>). On 13 October 2017, Zayner posted a video in which he injects himself with a plasmid designed to modify the gene for

myostatin, a genetic alteration that has engendered freakishly muscular mice and dogs. Zayner's public display is meant to "push the field of genetic engineering forward" by encouraging more people to experiment with genetic engineering in their homes and, if they follow Zayner's lead, in their bodies. This spectacle might be taken as support for a key premise of Lars Schmeink's *Biopunk Dystopias: Genetic Engineering, Society, and Science Fiction*: that the tropes and ideas first explored in the subgenre of science fiction labeled biopunk—in this case, the prospect of genetic self-experimentation framed as "biohacking"—have since diffused well beyond the confines of literary sf. Biopunk, Schmeink argues, is best understood as a "cultural formation" spanning fiction, film, video games, TV, and the social phenomena of DIYbio or biohacking of which Zayner is representative. Schmeink refers to a 2002 trend-spotting piece in *Rolling Stone* declaring that cyberpunk was giving way to biopunk as an early marker of this diffusion; the article refers to the novels of Octavia Butler, the television series *Dark Angel* (2000-2002), the work of the bio-artist Eduardo Kac, and the existence of an online shop selling biotech equipment (26). Since the late 1990s, Schmeink argues, references to genetic modification and other biological themes have become widespread in sf and mainstream culture.

Schmeink does not precisely delineate the bounds of the biopunk cultural formation, nor even how one might recognize a cultural formation more generally. (This term is never defined in the book, although in "Biopunk 101," an article published in *SFRA Review* [#309, 31-36] in 2014, Schmeink attributes it to the cultural critic Lawrence Grossberg). Instead, he illustrates the phenomena of biopunk through analyses of a variety of recent cultural artifacts that deal with themes of biological manipulation. The book's central claim is that

the rise of biology as one of the driving forces of scientific progress since the late 1970s, the mainstream attention given to genetic engineering in the wake of the Human Genome project (1989-2003), the changing sociological view of a liquid modernity, and the shifting discourses on the posthuman form a historical nexus that produces the cultural formation of biopunk—in terms of both a socio-political and scientific DIY biology movement and its artistic negotiation in the popular culture imagination. (28; see also 14)

While this phrasing would seem to suggest that the academic theories of liquid modernity and posthumanism helped to produce the cultural formation of biopunk, the book actually makes the case that biopunk reflects the social conditions that these theories describe. More generally, Schmeink argues that twenty-first-century sf shifts its focus away from the body implants and virtual realities of information and computing technologies toward biological technologies such as genetic engineering and xenotransplantation (7), and that these works display the hallmarks of critical dystopia. To my knowledge, *Biopunk Dystopias* is the first book-length monograph to focus exclusively on biotechnology in twenty-first-century science fiction and thus represents a valuable contribution for scholars interested in science fiction and cultural representations of biotechnologies. Moreover, it commendably reflects the

generic diversity of cultural imaginings of biotechnology, analyzing representative texts from film, television, and video games as well as literary fiction. The 2007 video game *BioShock*, for instance, to which Schmeink devotes a chapter, sold millions of units in addition to achieving critical acclaim, a reach that should pique the interest of anyone focused on the intersections of science, technology, and culture.

Schmeink's primary theoretical touchstone is the sociologist and philosopher Zygmunt Bauman, who argues that the later twentieth century is marked by a transition from "solid" to "liquid" modernity. Bauman contends that whereas solid modernity sought to replace pre-modern traditions and institutions with new structures such as the nation-state, liquid modernity is characterized by the weakening of even those modern institutions, a condition in which change itself is the only constant (48). Bauman's liquid modernity is further characterized by the increasing interdependence of communities around the globe—with a corresponding globalization of risk—and the dissolution of collective politics into individualized and market-mediated "life politics" (49). Of particular interest for sf scholarship is Bauman's argument that utopia shifts from a fixed and distant place associated with the far future to the flux of the present moment, epitomized in the figure of the hunter who thrills to the chase of new opportunities (61-62). "Liquid modernity" thus bears similarities to a number of theorizations of postmodernity, post-Fordism, and neoliberalism, and I found myself wishing for more contextualization of Bauman's liquid modernity in comparison with Fredric Jameson's postmodernity, given Jameson's longstanding interest in sf and his influence on sf scholarship.

Schmeink's other theoretical touchstone is the body of literature on posthumanism that will be familiar to readers of *SFS*, exemplified by authors such as Donna Haraway, Cary Wolfe, N. Katherine Hayles, and Rosi Braidotti. In the broadest sense, this literature can be glossed as arguing against a figuration of the human as an autonomous, rational, self-producing subject and for a more embedded and embodied perspective that punctures human exceptionalism in comparison to other life forms. In Schmeink's reading, biopunk fictions demonstrate how liquid modern conditions produce this posthuman subject. He argues that biopunk fictions are often critical dystopias, in which the posthuman emerges out of the problems and contradictions of the present, but which nevertheless contains a latent utopian potential for new ways of being. To take one example, the proliferation of genetically engineered "bioforms," including "pigoons"—pigs with human parts, including human brain tissue—in Margaret Atwood's *MADDADDAM* trilogy (2003-2013) is linked to the "hypercapitalist" commodification of life (90). Not only do pigoons confuse the boundaries between human and animal, but these engineered life forms also exceed their intended use value, as do the engineered creatures in Paolo Bacigalupi's *The Windup Girl* (2009). Their uncontrollability challenges the "mechanized and utilitarian view of nature" (86) that serves as a foil to the autonomous and agential human subject.

While Schmeink contends that twenty-first-century sf moves away from a cyberpunk imaginary "embodied by Haraway's cyborg" towards a biopunk

imaginary characterized by the “splice” (7), one can question whether this thematic shift masks a deeper continuity. Biotechnology also figures in “A Cyborg Manifesto” (1984), in which Haraway argues that biotechnology and information technology are both underwritten by a common paradigm that views the world in terms of code. Should biopunk then be seen as a “paradigm shift” (5), or an extension of the cyberpunk logic of code to the stuff of life? Considering the boundaries of biopunk through the lens of genre and literary movements only adds further complications. Schmeink often refers to biopunk’s “heritage in cyberpunk” (71), briefly referring to Bruce Sterling and Greg Bear as cyberpunk-affiliated authors who foreground biological themes. Yet he also includes contemporaneous authors such as Octavia Butler and Nancy Kress who were never part of cyberpunk as part of the biopunk formation, leading him to remark that the term biopunk is actually a “misnomer” (25). Rather than conduct a genealogical analysis of biopunk that would tease apart these different threads, Schmeink limits his analysis to texts that were produced after 2000, in effect providing a survey of twenty-first-century biologically inflected fictions across media. A benefit of this approach is that it allows Schmeink to acknowledge diversity within the biopunk cultural formation. For example, he accurately observes that the social practices of DIY biology and biohacking contain more of a punk sensibility than do the critically dystopian cultural artifacts he analyzes.

The weakest aspect of the book, in my mind, is Schmeink’s uncritical adoption of some rather sweeping claims from Bauman’s theory as a basis for his readings of biopunk works. For example, Chapter 4, “Science, Progeny, and the Family,” argues that Vincenzo Natali’s film *Splice* (2009) reveals the ways in which liquid modernity has contaminated family bonds. Due to the “liquid modern horror of continuous commitment” (135) and the ways in which reproduction is increasingly mediated by technoscience and market processes, we are told that children are liable to be treated as commodities and “human bonds become frail and easily untied” (138). Equally hyperbolic generalizations appear in other chapters as well, in which Schmeink refers to a “radical change in the make-up of inter-human relations” in liquid modernity, in which “one needs to be able to cut any relation with speed and decisiveness” (219). The mediation of reproduction by technoscientific capitalism unquestionably raises ethical issues, particularly along the axes of economic and racial inequality. To insinuate a general association between reproductive technologies and the decay of authentic human relations, however, seems dubious in light of the fact that the post-2000 period has witnessed a growing acceptance of a variety of family structures outside the heterosexual nuclear family, many enabled by reproductive technologies. If *Splice* is indeed a warning about the “interpersonal consequences of relegating procreation to science and extracting it from stable, secure social relations” (16), some skepticism—or at least, a greater degree of nuance—is called for when analyzing this fear. In Schmeink’s analyses, the fictional texts tend largely to illustrate the theories of liquid modernity and posthumanism rather than complicating or challenging them. I would have liked to see more follow-

through in the later chapters of an intriguing suggestion that Schmeink floats in the introduction: that Bauman's theory can itself be read as a kind of critical dystopia, and perhaps can be taken rather less literally.

Despite my skepticism of some of the ways in which theory is invoked and frustration with jargon-laden passages that could have benefitted from further editing, I found many of Schmeink's textual analyses to be insightful. The chapter on *BioShock* convincingly demonstrates how the affordances of the video-game form structurally reproduce the limits of choice in a constrained environment. *BioShock*'s "procedural rhetoric," in which one must upgrade one's biology to progress in the game, suggests that "becoming posthuman" is "non-optional" (160). The game thus offers an important rejoinder to the celebration of self-creation as individual empowerment offered by biohackers such as Zayner. Schmeink's side-by-side comparison of Margaret Atwood's *MADDADDAM* trilogy and Paolo Bacigalupi's *The Windup Girl* provides a nuanced reading of the different degrees to which each text challenges or upholds aspects of humanism by way of fictional worlds rife with genetically engineered humans and nonhuman animals. Other chapters treat the television show *Heroes* (2006-2010) and the zombie film series *Resident Evil* (2002-2012) and *28 Days Later* (2002/2007). Each discussion engages thoroughly with relevant scholarship, from biopolitics to game studies to creature films and the horror genre. Together, they make a convincing case that biological themes are prominent in contemporary sf across media, appearing in works that are marked by a critically dystopian sensibility. Readers wanting a clearer definition of biopunk as a cultural formation, however, may wish to begin by consulting Schmeink's *SFRA* article on the same topic.—**Rebecca Wilbanks, Johns Hopkins University**

**Steampunk Materiality for the Digital Humanities.** Roger Whitson. *Steampunk and Nineteenth-Century Digital Humanities: Literary Retro-futurisms, Media Archaeologies, Alternate Histories*. New York: Routledge, 2017. xiv + 229 pp. \$140 hc.

In this follow-up to his *William Blake and the Digital Humanities* (2013), Whitson examines and theorizes the fandom practices of steampunk, a twenty-first-century phenomenon that encompasses aesthetics, media, and performance predominantly inspired by the Victorian era. Eschewing the common definition of steampunk as "just an aesthetic, a fandom, or literary genre," he offers the intriguing definition of steampunk as a "digital media practice" (11) that provides a compelling model for performing art, retrocomputing, and public digital humanities as ways that open such practices to a greater diversity of participants. He argues that digital humanities are currently limited to a focus on archiving and preservation, when scholars could be engaging with these archives more actively through various material and narrational methods, exemplified in steampunk through the construction of gadgets, appropriation of older technological methodologies, and reconsideration of political protest through counter-historical imaginaries.

The first chapter explores the function of time-critical devices in relation to cultural history: on one hand, devices such as computers can signify human