

H-Diplo | ISSF Review Essay 54

P.W. Singer and August Cole. *Burn In: A Novel of the Real Robotic Revolution*. Houghton Mifflin Harcourt, 2020. ISBN 9781328637239 (hardcover, \$28.00); 9780358508618 (paperback, \$16.99).

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How Robotics Shape Politics: Prediction and Useful Fiction

Social science largely concerns the past. Scholars employ data in a variety of ways to understand, analyze and explain events that have already occurred. Sometimes, scholars attempt to predict the future, but the purpose of theorizing is often not prediction. Scholarly analyses are limited to the analysis of factual events, and often do not attempt to reach a general audience.

In contrast, P. W. Singer and August Cole's *Burn In: A Novel of the Real Robotic Revolution* is a "meld of fiction and nonfiction" (388). Singer holds a Ph.D. in Political Science from Harvard and currently serves as "Strategist" for the New America Foundation. After writing four award-winning non-fiction books, he teamed up with August Cole, a journalist and storyteller, to craft a new type of book: "useful fiction."¹ *Ghost Fleet: A Novel of the Next World War* was this first of this genre, and was a tremendous hit.² The book enjoyed wide reach and influence, echoing through the U.S. Navy and Hollywood. *Burn-In* is their second work in this new, "useful fiction" (388) genre.

The book was scheduled for release in March 2020, but the production warehouse—and bookstores in airports and main streets that might sell such a book to casual browsers—all shut down due to COVID-19. Within a matter of months, the national conversation shifted to the deep practices of racial injustice in the United States. Although the book does not touch on either problem—disease or racism—the Coronavirus pandemic has accelerated many of the problematic trends in automation that the novel addresses: division, surveillance, and societal distrust. These themes are of interest to a wide range of scholars in International Relations, American Politics, and Comparative Politics, including those who study cyber security, coalitions and social movements, conflict, and technology and big data.

The protagonist in *Burn In* is FBI Special Agent Lara Keegan, a former marine turned field agent. Some suspension of disbelief is required that someone so young—Keegan appears to be in her early to mid-thirties—would have so much

¹ P. W. Singer, *Wired for War: The Robotics Revolution and Conflict in the Twenty-First Century* (New York: Penguin Press, 2009); Singer and Emerson T. Brooking, *Likewar: The Weaponization of Social Media* (Boston: Eamon Dolan/Houghton Mifflin Harcourt, 2018); Singer, *Children at War* (Berkeley: University of California Press, 2006); Singer, *Corporate Warriors: The Rise of the Privatized Military Industry*, Updated ed, Cornell Studies in Security Affairs (Ithaca: Cornell University Press, 2008).

² Singer and August Cole, *Ghost Fleet*, Houghton Mifflin Harcourt, 2016.

knowledge and combat experience. She is, however, a compelling narrator. The reader is introduced to Keegan as she first deters a bomb plot within the D.C. Metro. Following her heroics, she is tasked with piloting a new program at the FBI where field agents are given a robotic partner, a “Tactical Autonomous Mobility System,” or TAMS for short (46). This burn-in, or as TAMS helpfully defines, a “continuous operation of a device, such as a computer, as a test for defects or failure prior to putting it to use” in use until failure, forms the motivation for the plot (48). We follow Keegan and TAMS, exploring what is innately human as opposed to machine.

The near-future world in which *Burn In* takes place is one where self-driving cars are ubiquitous, law enforcement and agents have their capabilities augmented by AI—including facial recognition technology—and economic anxiety is widespread as numerous jobs are assumed by robots and automation. Lara Keegan’s own husband, a former lawyer, has been replaced by technology and now spends his days working a gig-economy companionship job through a VR headset while battling the mental health challenges. The scenario is at once personal and intimate, but the echoes for Political Science are clear. The Washington D.C. sketched out in *Burn In* illustrates a world in which technological change came very quickly and on a tremendous scale not seen since the Industrial Revolution, a period of scientific and financial development that also revolutionized politics. The novel invokes these recognizable and enduring catalysts of political change and applies them to our present AI and technological revolution, asking what technology will aid and what it will harm, in addition to who the winners and losers might be.

Burn In also asks important questions about how to maintain inclusiveness and societal trust in this near-future world. Singer and Cole use Keegan and the characters around her to both argue and illustrate that algorithms designed to maintain our focus have the unintended effect of playing to basic and strong emotions—such as outrage and fear—even without outside influence from hostile actors. Simply by trying to maintain attention and usage, devices and technology push individuals toward the fringes and extremes of emotion and belief. Emerging from, and perhaps as a consequence of, this world of algorithms, a political coalition forms from a diverse group of people suspicious of the advance of AI. The coalition includes a wide array of formerly disunited groups in American politics, some of whom are bent on committing acts of domestic terror. This brings us to another theme that *Burn In* explores: different ideologies of the coming world and what to do about it, as illustrated by characters in the book. In this near-future Washington D.C., the movement against technological change reflects the diversity and breadth of individuals affected by this revolution.

Perhaps the greatest strength of *Burn In* and this genre of “useful fiction” is that as much if not more so than presenting a political argument, it presents questions that both the public and practitioners alike should be asking (if they are not already). In a readable novel with relatable characters, Singer and Cole prompt questions such as what it means to be human, how society should approach the ethics of AI and automation in both warfare and our everyday lives, and what limits should be placed on the collection of personal, private data.³

Burn In’s position on the junction of fiction and academic writing is exemplified when looking at what *Goodreads*, an Amazon-driven social media site for book reviews and recommendations, indicates readers of *Burn In* also enjoyed. Some of the first recommendations the algorithm (fitting, given the content of the book) delivers are wildly popular novelistic thrillers, such as Lucy Foley’s bestseller *The Guest List*.⁴ But coexisting within the same recommendations section are *The Kill Chain* by former senior advisor to Senator John McCain, Christian Brose, and *Active Measures: The Secret History of*

³ For nonfiction works addressing similar issues, see Jamie Susskind, *Future Politics: Living Together in a World Transformed by Tech* (Oxford: Oxford University Press, 2020); Susan Schneider, *Artificial You: AI and the Future of Your Mind* (Princeton: Princeton University Press, 2019); Henry Farrell and Abraham Newman, *Of Privacy and Power: The Transatlantic Struggle over Freedom and Security* (Princeton: Princeton University Press, 2019); Eli Berman et al., *Small Wars, Big Data: The Information Revolution in Modern Conflict*, (Princeton: Princeton University Press, 2020).

⁴ Lucy Foley, *The Guest List* (New York: William Morrow, 2020).

Disinformation and Political Warfare, by Thomas Rid.⁵ Goodreads is probably correct that a lover of fiction thrillers will enjoy *Burn-In*, as will those seeking a deep dive into an expert's view on how wars will be fought in the not-so-distant future (*The Kill Chain*) and a narrative history of disinformation from interwar secret deceptive operations to common internet trolling (*Active Measures*). *Burn In* allows both scholars and fiction connoisseurs to peer into this research-informed future, and begin to contemplate how to respond.

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⁵ Christian Brose, *The Kill Chain: Defending America in the Future of High-Tech Warfare*, First edition (New York: Hachette Books, 2020); Thomas Rid, *Active Measures: The Secret History of Disinformation and Political Warfare* (New York: Farrar, Straus and Giroux, 2020).