

forces? The answer is an ambitious and useful examination of how war is changing in light of emerging technologies, such as autonomous unmanned aerial vehicles (UAVs, or drones) and cyber weapons able to leverage artificial intelligence (AI). Members of the joint force willing to brave the occasional academese passages on Clausewitzian theory will find gems of insight throughout *Surrogate Warfare*.

This well-researched volume benefits from the considerable experience of two defense scholars at Kings College London. Andreas Krieg has a background supporting professional military education for officers of the British and overseas armed forces, and Jean-Marc Rickli mines his experience as the head of global risk and resilience at the Geneva Centre for Security Policy (GCSP) in Switzerland. Together, they have created a framework for considering ways that nations may ease the burden of warfare by constructing “security assemblages” of irregular forces, both human and machine, that afford strategic leaders the ability to coerce adversaries overseas while avoiding political upheaval at home.

The book surveys the use of surrogates throughout history, taking the reader from the adventures of Sir Francis Drake—English privateer of the Elizabethan era—and his exploits liberating gold and silver from Spanish colonies in South America, to the modern use of Stuxnet to slow the Iranian nuclear program. The authors attempt to broaden the scope of surrogates in warfare by examining an evolving array of entities, from privateers to modern mercenaries and contractors. Technological surrogates, however, remain a central focus. It is a thought experiment likely to provoke healthy debate among scholars and practitioners alike.

The authors also propose an update to Carl von Clausewitz’s “trinity” of society, state, and soldier, a concept they rebrand as the “neo-trinitarian” aspects of modern warfare that are now “privatized,” “securitized,” and “mediatized.” This is deeply academic but should intrigue more than just military theorists. It is worthwhile framing for those in the joint force who must increasingly

Joint Publications (JPs) Under Revision (to be signed within 6 months)

JP 1-0, *Personnel Support*

JP 2-0, *Joint Intelligence*

JP 3-0, *Joint Operations*

JP 3-03, *Joint Interdiction*

JP 3-07, *Stability*

JP 3-20, *Security Cooperation*

JP 3-25, *Countering
Threat Networks*

JP 3-36, *Joint Air Mobility
and Sealift Operations*

JP 3-63, *Detainee Operations*

JPs Revised (signed within last 6 months)

JP 1, *Doctrine for the
Armed Forces of the United
States, Vols. 1 and 2*

JP 3-05, *Special Operations*

JP 3-26, *Combating Terrorism*

JP 5-0, *Joint Planning*

JP 3-72, *Nuclear Operations*

JP 3-85, *Joint Electromagnetic
Spectrum Operations*

consider the “burden” of war and the implications of externalizing it to machines such as UAVs and advanced autonomous weapon systems, or for those who must now contend with the dynamics of novel cyber weapons and social media “super influencers,” all powered by increasingly independent artificial intelligence.

Krieg and Rickli also explore the well-known promises and challenges of integrating AI into joint force operations and grand strategy. What is new, however, is the attempt to ground this discussion in a comprehensive historical framework of military theory while tackling broader ethical dilemmas. What does it mean when the state becomes, as Krieg and Rickli observe, simply a remote manager of violence? These are considerations that will become only more pronounced as the United States and its allies seek to recover from the impact of the novel coronavirus.

The implications of growing more reliant on technological surrogates are discussed so convincingly and thoroughly in *Surrogate Warfare* that the book falls short only in its scope. While the authors acknowledge their Western perspectives of military theory, the latter part of the book goes to Krieg’s and Rickli’s deep experiences in the Middle East, as they discuss Iran’s extensive and creative use of surrogate warfare—something likely

to continue despite the killing of General Qasem Soleimani on January 3, 2020, by a U.S. military drone, the quintessential technological surrogate. It is a useful deep dive, but the book would have benefited from a wider aperture and the examination of a peer competitor primed to use a range of surrogates both technological and otherwise. This is especially salient as U.S. strategic focus turns to East Asia and Great Power competition in the aftermath of the coronavirus pandemic.

While *Surrogate Warfare* offers a wealth of history, theory, and novel thought about the nature of surrogates and their evolving technological dimensions in war, it is the near- and long-term engagement with near-peer competitors in the wake of the coronavirus that serves as a catalyst to recommend this book to the joint force. As theories abound about the origins of the microscopic force that has changed the world in a few months, it is clear that the diminished ways and means of the United States, its allies, and its partners will make the lessons of *Surrogate Warfare* necessary, even required reading for all strategic leaders. JFQ

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