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Artificial Intelligence and Global Security: Future Trends, Threats and Considerations

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and unsure of himself—but also lucky, in that he made fewer mistakes than Takagi and Hara. More importantly, the Japanese needed to maintain their momentum, and that required an outright victory. Much of Japan’s strategic failure was the fault of Admiral Isoroku Yamamoto, the fleet commander, who did not give his men in the field enough carriers to overwhelm the Americans at a time when it was still possible for the Japanese to do so; instead, it was an even fight. “It had been his best (and would prove to be his last) chance to achieve an easy strategic victory over the Americans, and he simply overlooked it. Simply stated, this was a battle the Japanese could have and should have won, but chose not to; the opportunity would not come again” (p. 282).

The book is not unblemished. For example, Stern seems overly fond of military acronyms. However, most of its faults lie with the publisher rather than the author. At forty-five dollars, *Scratch One Flattop* seems to be priced too high. Moreover, the quality of maps, photos, and diagrams leaves something to be desired. Still, all told, Stern offers an intriguing and valuable read that will be of interest and use to students of World War II at all levels.

NICHOLAS EVAN SARANTAKES



Artificial Intelligence and Global Security: Future Trends, Threats and Considerations, ed. Yvonne R. Masakowski. Bingley, U.K.: Emerald Publishing, 2020. 187 pages. \$99.99.

Grappling with the technological, policy, planning, and ethical issues attendant to the emergence of artificial intelligence (AI) is a daunting task

and, given the complex nature of this interdisciplinary science, a challenge that can boggle the mind (pun intended). *Artificial Intelligence and Global Security* is a trim volume of interrelated chapters, skillfully edited by Dr. Yvonne Masakowski, that provides a timely primer on the moral, ethical, and policy implications associated with AI. While ostensibly a book about technology, this is not a technological book. Rather, Masakowski and the contributing authors serve up thought-provoking and relevant discussions that will challenge the reader’s notions about AI when juxtaposed against theories of just war doctrine, individual and societal morality, and the ethical constraints and opportunities within the context of the global security environment.

With her education and experience in psychology and philosophy, and her recent professorship in the College of Leadership and Ethics at the Naval War College, Masakowski is uniquely suited as editor of this volume. She has assembled a clowder of established scholars who are predominantly trained in ethics and philosophy and has interspersed a brace of programmatic and technical experts. Together, these chapter authors examine a broad swath of philosophical and ethical issues, including in individual chapters on the ethical dilemmas of AI and privacy, AI and moral reasoning, and the particular challenges of AI and space warfare, as well as several discussions of future considerations for AI from both ethical and policy perspectives.

Among the book’s most engaging chapters, William Casebeer’s discusses the building of an artificial conscience and the prospects for a morally

autonomous AI. Currently a senior researcher in human-machine systems in the private sector, Casebeer's central question is whether AI can be used to develop systems capable of reasoning through moral issues. He makes an argument for why we need to build this artificial conscience soon, given that AI already is being used in multiple domains, then goes on to present a rough blueprint for how to build one. He describes how a machine with an ethically grounded and morally driven conscience may be coming to a battlefield near you soon—no longer bearing the tincture of science fiction.

The fulcrum chapter of the book, authored by John Shook, Tibor Solymosi, and James Giordano on the ethical constraints and contexts of AI use in national security and warfare, is likely to be of keen interest to readers of the *Naval War College Review*. This chapter describes a continuum from “soft” to “hard” AI based on structural and functional complexity that is useful in determining attribution of actions—an especially critical consideration for the use of AI in warfare. The authors contend that with *soft* AI, the human fingerprint is evident and attribution is readily detected, but as AI moves along the continuum toward *harder* systems that are autonomous and capable of developing intelligence beyond initial programming, attribution will become far more problematic. Here, a HAL 9000–like machine developing actions and outcomes not intended by human programmers and resistant to “exogenous attempts at constraint, imposition, and control” is the elixir of science fiction. The value of this chapter is in understanding the essential characteristics of AI across the continuum and in determining

the bespoke development, application, and constraints of all forms of AI.

The penultimate chapter of the book, by Gina Granados Palmer, an interdisciplinary scholar, harvests the detailed work in the preceding chapters and develops a comprehensive summary of the book's themes. Here Palmer provides a thoughtful assessment of AI's overall security landscape and develops four key considerations relating to (1) the evolution of near-Turing-test ethics in the human-machine team; (2) the creation of short-, intermediate-, and long-term strategies for ethical AI development and use; (3) the development of dual-use ethics in relation to dual-use AI; and (4) the urgent need for strong ethical foundations to underpin AI technological advances.

The volume concludes with a forward-looking epilogue by Dr. James Canton, a well-known futurist, who highlights the opportunities as well as the dangers of AI in the global security environment. This final chapter, like the future of AI itself, is simultaneously hopeful and frightening. As Canton points out, “we cannot fully fathom” the full potential—both bright and dangerous—of an AI-infused future. He underscores that security at both the local and global levels cannot be conceptualized without fully envisioning how AI will evolve—a prophetic and prescriptive admonition.

Artificial Intelligence and Global Security is not a compendium of information on current AI technology and its essential tools; given the rapidly changing nature of AI, the usefulness of such a book would be fleeting and ephemeral. Rather, here readers will discover a transcendent and informed exploration of the

ethical, moral, individual, societal, and policy issues surrounding AI. It is the book's discussion of the enduring nature of these issues that will be of value and greatest significance to the national-security community.

THOMAS CULORA



Six Victories: North Africa, Malta, and the Mediterranean Convoy War, November 1941–March 1942, by Vincent P. O'Hara. Annapolis, MD: Naval Institute Press, 2019. 322 pages. \$34.95.

In his latest book, Vincent P. O'Hara adds to his previous works on the Mediterranean during World War II by analyzing the period between November 1941 and March 1942. He considers six decisive actions that changed the tide of the naval war in the Middle Sea, three of which went in favor of the British (the actions of Force K, the battle of Cape Bon, and the first battle of Sirte [Sidra]) and three in favor of the Italians (Alexandria, the loss of Force K, and second Sirte).

The author's detailed narrative reminds the reader that the Mediterranean war was one of naval attrition around the sea-lanes crossing the theater.

An essential question in *Six Victories* is the influence of intelligence on naval operations. According to O'Hara, while ULTRA provided critical data on many occasions, information often was untimely and was offset by Italian counterintelligence. O'Hara's thesis is not entirely new; Italy's leading scholar working on ULTRA, Alberto Santoni, reached similar conclusions in his 1981 study *Il vero traditore*, which is not among the author's references. O'Hara claims that the higher ratio of Axis

attacks against British convoys demonstrates that ULTRA did not affect the operations significantly. The argument is captious, since possessing intelligence does not mean necessarily that it is possible for one to attack; that possibility was reduced severely for Britain in the latter three of the "six victories." However, when the British had the means, as during the operations of Force K, ULTRA allowed them to maximize the effectiveness of their limited forces, which were numerically inferior to the enemy's and had fewer bases available to them in the central Mediterranean. Finally, the British ratio of success for attacked convoys was better than that of the Axis.

Six Victories also puts great emphasis on the consequences of the three Italian victories. The destruction of Force K ended a nightmare period for the Italian convoys, while Alexandria allowed the Axis to achieve preeminence in the central Mediterranean. The pinnacle was the second Sirte battle, defined as an Italian victory—correctly reversing the judgment of some British naval historians. Also, according to O'Hara, the battle proved that the Italian surface fleet was a credible deterrent, discouraging further British attempts to resupply Malta (p. 254). Yet while the author's conclusion that second Sirte was an Axis victory is persuasive as far as the destruction of the enemy convoy goes, it is not so with respect to its consequences. The action did not discourage further British attempts to resupply Malta; instead, it encouraged the Royal Navy to think that light surface forces were sufficient to meet the Italian fleet, preparing the way for the disaster of HARPOON-VIGOROUS in June 1942.

Here the major shortcoming of the book becomes apparent: not putting the Italian actions into the