

2021

## Review Essay—Adaptation and the School of War: "Mars Adapting: Military Change during War"

John T. Kuehn  
*The U.S. Naval War College*

Frank G. Hoffman

Follow this and additional works at: <https://digital-commons.usnwc.edu/nwc-review>

---

### Recommended Citation

Kuehn, John T. and Hoffman, Frank G. (2021) "Review Essay—Adaptation and the School of War: "Mars Adapting: Military Change during War";" *Naval War College Review*. Vol. 74 : No. 4 , Article 12.  
Available at: <https://digital-commons.usnwc.edu/nwc-review/vol74/iss4/12>

This Article is brought to you for free and open access by the Journals at U.S. Naval War College Digital Commons. It has been accepted for inclusion in Naval War College Review by an authorized editor of U.S. Naval War College Digital Commons. For more information, please contact [repository.inquiries@usnwc.edu](mailto:repository.inquiries@usnwc.edu).

## ADAPTATION AND THE SCHOOL OF WAR

*John T. Kuehn*

*Mars Adapting: Military Change during War*, by Frank G. Hoffman. Annapolis, MD: Naval Institute Press, 2021. 368 pages. \$39.95.

Retired Marine officer and National Defense University research fellow Frank Hoffman's *Mars Adapting* is, first and foremost, a work of military theory. Hoffman initially achieved notoriety for his work and briefs about something he characterized as *hybrid* or *compound warfare*, since popularized alongside the rise in interest in *gray-zone conflict*.<sup>1</sup> This book's major contribution is similarly theoretical, but in the area of institutional learning, not modalities of war. Hoffman argues "for greater consideration of Organizational Learning Theory [OLT] to establish an analytical framework." That framework leads to a model presented in chapter 2 (where most of his theoretical discussion resides) that Hoffman devised to understand the processes by which military institutions adapt in war (pp. 40–42).

The book can be broken into three sections. First, Hoffman explains his approach, then presents his framework and model in the introduction and chapter 2. Hoffman's use of OLT results in a model that explains adaptation by organizations engaged in combat as a learning process. This model, derived from a number of social science disciplines, has four steps, with feedback mechanisms, that Hoffman labels "inquire," "interpret," "investigate," and "integrate & institutionalize" (p. 40, table 2.2). He calls this the Organizational Learning Cycle (OLC). He also identifies four attributes that contribute to something known as "Organizational Learning Capacity," which essentially is the ability of an organization to learn (or not learn). The factors are leadership, organizational culture, learning mechanisms, and dissemination mechanisms (pp. 44–54).

The second section of the book consists of four chapters, each of which focuses on adaptation in war by organizations and institutions as a means by which to test his model. He focuses primarily on armed-service institutions as the entities to which he applies his adaptation–organizational learning model. The cases proceed chronologically and cover the following: the U.S. Navy and its submarine campaign in the Pacific during World War II (chapter 3), the U.S. Air Force in the Korean War (chapter 4), Vietnam and the

*John T. Kuehn is a professor of military history at the U.S. Army Command and General Staff College and a former Ernest J. King Professor of Maritime History with the Hattendorf Historical Center at the Naval War College. He retired from the U.S. Navy in 2004 at the rank of commander after twenty-three years of service as a naval flight officer. His latest book, with David Holden, is The 100 Worst Military Disasters in History (ABC-CLIO, 2020).*

Naval War College Review, Autumn 2021, Vol. 74, No. 4

U.S. Army (chapter 5), and finally the Marines in Iraq at the various battles of Fallujah (chapter 6). The final chapter, comprising the third section, presents his conclusions, derived from how his model fared in each of these cases and the implications raised in the process.

The first case study shows how messy adaptation was for the U.S. Navy and its submarine force in the Pacific against Japan. While this campaign often is presented as an outstanding success, it got off to a rocky start. As Hoffman notes, problems of one kind often masked deeper problems that delayed the campaign achieving efficacy, and despite having very good submarines as the basic tool of war. This study, especially, supports Hoffman's contention about bottom-up innovation, in this case at the individual submarine crew and leader levels, as being critical to successful adaptation in war (pp. 102–103). The chapter supports as well his ideas about Organizational Learning Capacity, at least at the level of the submarine community, if not the larger Navy. This first case study also lets the reader know that Hoffman's approach includes a "warts and all" objectivity and emphasizes how contingent the adaptation process can be. Another conclusion that emerges is that adaptation in war can be not only a messy but a lethal business, and one that not always is rewarded.

The second study, on airpower in Korea and the Air Force, brings to the fore the problems of culture. At the time of the war's outbreak, that service's mind-set could be characterized as "bomber culture." Because this culture left the larger Air Force leadership in some sense myopic, Hoffman again finds that adaptation tended to bubble up from the bottom, from the fighter and attack pilots in the theater. One problem with this chapter is its conflation of airpower with the Air Force. This is unfortunate, since both the Marines and the Navy participated also, and the chapter might have provided even more grist for Hoffman's mill if it had included a more detailed look at these airpower organizations. Either that, or Hoffman might have made clear what was "just Air Force" versus the larger joint, and even coalition, air effort. It was not a homogeneous air campaign with absolute unity of command, which was indeed what the Air Force had wanted ever since 1947. In the end, though, Hoffman—on the basis of very thin evidence—gives the Air Force credit for being more adaptive than the other services (p. 152). This seems odd, given that the air components of the Marines and Navy presumably were a part of the success under discussion.

The third case study, on Vietnam, is the most critical, as one would expect. Here Hoffman does find the U.S. Army adapting, but to little effect beyond the tactical level and far too slowly in relation to the enemy. This case study emphasizes the relational dynamic of his model. Military adaptation does not occur in a vacuum; as it is often put in U.S. professional military education institutions, "the enemy gets a vote." Thus, this might be characterized as the book's "failure" case

study, illustrating why adaptation can occur but still be insufficient to achieve an organization's objectives. Hoffman finds that the result of the Army's adaptation "went no further than to reinforce the firepower-centric approach favored by the operational commander" (p. 196). Unlike the U.S. Navy's submarine experience in World War II, adaptation did not produce strategic results or lead to success in Vietnam for the U.S. Army.

In the final case study Hoffman addresses the Marines in central Iraq around Fallujah. Here again he is on solid ground, with his model holding up well in its explanatory power and its contention that organizational learning from the bottom up can lead to successful systemic adaptation and thereby have an out-size effect beyond the tactical-level battlefield. Of the four case studies, this one comes the closest to supplying what "right" looks like, especially with respect to OLC and the Marines' ability to learn quickly from their mistakes and then diffuse new ways of doing business. However, one would expect the U.S. military to have made some progress since the Vietnam War in improving its systems for organizational learning and dissemination. That did seem to be the case for the Marines in Iraq, despite the Corps suffering from considerable "forgetting" after Vietnam and leading up to the events in Iraq after 2003.

Unsurprisingly, Hoffman concludes by offering up the OLC "postulated in this book . . . as a useful framework of a complicated heuristic process" (p. 248). The case studies provide considerable support as well for his thesis that OLT is a useful approach for studying adaptation in war. Readers of this journal will find his implications (pp. 269–270) valuable when they become decision makers and leaders of organizations themselves. At that point they will be responsible, for example, for creating mechanisms to discover and disseminate new ways of doing business that lead to mission success.

The book does have some weaknesses, albeit minor. First, it is a ponderous read, especially chapter 2; at times it reads like a social science dissertation. There is an odd inconsistency in personal pronoun usage, with Hoffman switching from "I" to "we" and "us" for no discernible reason, especially since he is the only author. Despite these quibbles, students of military innovation and adaptation will find much in the book to appreciate and ponder. Military historians will find value in Hoffman's application of his model to the case studies about adaptation in war. Strategists and professional military educators alike will find the conclusions in the final chapter worth—in Hoffman's phrasing—investigating.

---

#### NOTE

1. See, for example, Frank G. Hoffman, *Conflict in the 21st Century: The Rise of Hybrid Wars* (Arlington, VA: Potomac Institute for Policy Studies, 2007).

