

Readings on Military Innovation

The culture of a military organization is the most important enabler to innovation. War is a test of institutions. Cultures that inhibit the growth of new ideas or hold contempt for lessons of the past do not innovate. Because the nature of the next war cannot be predicted, the military profession is not only the most demanding of all the professions physically, it is also the most demanding intellectually. The following books examine how an army's success or failure on the battlefield is directly linked to that army's culture.

1. Brian Bond, *British Military Policy between the Two World Wars* (Oxford: Oxford University Press, 1980).

The most thorough examination of the British Army's flawed culture prior to World War II.

2. Eliot A. Cohen and John Gooch, *Military Misfortunes: The Anatomy of Failure in War* (New York: The Free Press, 1990).

A military's culture is the most important factor in studies of military failures.

3. James S. Corum, *The Roots of Blitzkrieg: Hans von Seeckt and German Military Reform* (Lawrence, KS: University Press of Kansas, 1992).

4. Robert Doughty, *Seeds of Disaster: French Army Doctrine in the Interwar Years* (Hamden, CT: Archon Books, 1986)

An analysis of the significant flaws in French military doctrine, developed by a mis-reading of World War I and a rigid culture of compliance to a flawed doctrine.

5. Bryon E. Greenwald, *The Anatomy of Change: Whey Armies Succeed or Fail at Transformation* (Arlington, Virginia: Association of the U. S. Army, 2000)

6. Andrew F. Krepinevich Jr., *The Army and Vietnam* (Baltimore, MD: Johns Hopkins University Press, 1986).

The best analysis of the U.S. Army's culture, norms, and institutional decision making during Vietnam.

7. Allan R. Millett and Williamson Murray, *Military Effectiveness* (London: Allen and Unwin, 1988).

Volume 1: World War I

Volume 2: The Interwar Period

Volume 3: World War II

8. Williamson Murray and Allan R. Millet, editors, *Military Innovation in the Interwar Period* (New York: Cambridge University Press, 1996).

A survey of major military innovations in the 1920s and 1930s, this book examines military cultures, doctrinal developments, the effects of budgets, and how and why innovation occurred. Chapters:

1. "Armored warfare: The British, French, and German experiences" by Williamson Murray
2. "Assault from the sea: The development of amphibious warfare between the wars – the American, British, and Japanese experiences" by Allan R. Millett

3. "Strategic bombing: The British, American, and German experiences" by Williamson Murray
 4. "Close air support: The German, British, and American experiences, 1918-1941" by Richard R. Muller
 5. "Adopting the aircraft carrier: The British, American, and Japanese case studies" by Geoffrey Till
 6. "Innovation ignored: The submarine problem – Germany, Britain, and the United States, 1919-1939" by Holger H. Herwig
 7. "From radio to radar: Interwar military adaptation to technological change in Germany, the United Kingdom, and the United States" by Alan Beyerchen

"Alan Beyerchen's essay...of how culture, organization, and strategic predicament shape a military's reception of a new technology is simply brilliant." – *Foreign Affairs*
 8. "Innovation: Past and future" by Williamson Murray
 9. "Patterns of military innovation in the interwar period" by Allan R. Millett
 10. "Military innovation in peacetime." by Barry Watts and Williamson Murray
9. Williamson Murray, "Comparative Approaches to Interwar Innovation," *Joint Forces Quarterly* (Summer 2000), pp 83-90.
- Both the interwar Royal Air Force and the U.S. Army Air Corps developed a number of flawed 'generic' doctrines that were disproven in actual combat. The RAF showed much indifference to the problems of air-to-air combat and bombing accuracy prior to World War II.
10. Williamson Murray, "Thinking About Innovation," *Naval War College Review*, (Summer 2001), pp 119-129.
11. Williamson Murray, "Clausewitz Out, Computer In: Military Culture and Technological Hubris" *The National Interest* (Summer 1997), pp 57-64.
- U.S. technological focus completely overrode historical and cultural memory during the war in Vietnam. Murray discusses the intellectual emphasis of the U.S. war colleges and staff colleges during the 1920s and 1930s. By 1965, a different breed of less well-rounded leaders had emerged. "American technology...was rendering...history, culture and the...understanding of war irrelevant."
12. Stephen P. Rosen, *Winning the Next War: Innovation and the Modern Military* (Ithaca, NY: Cornell University Press, 1991).
13. Harold R. Winton, *To Change an Army: General Sir John Burnett-Stuart and British Armored Doctrine, 1927-1938* (Lawrence, KS: University Press of Kansas, 1992).
14. "History of Transformation," *Military Review*, (May/Jun 2000), pp 17-29.
- Twelve reorganizations by the U.S. Army, driven to meet specific threats as opposed to technological developments, are discussed.