



A Scientific Way of War: Antebellum Military Science, West Point, and the Origins of American Military Thought by Ian C. Hope.

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Review by Richard Swain, Lexington, KY (swainr2@hotmail.com).

In *A Scientific Way of War*, Ian Hope, a Canadian military officer, combat commander (Afghanistan), and teacher discusses the source and the influence of a particular *mentalité* (10; *sic*) that emerged in the US Army in the nineteenth century:

I attempt here to demonstrate that the doctrine inculcated at West Point in the antebellum period, called military science, containing an enduring and coherent military theory, was the foundation for broader American military thought ... applied in the Civil War. The doctrine came not from any particular strategy or ideas of policy choices but from a prevailing—perhaps obsessive—intellectual movement that sought mathematical and scientific explanation for the phenomenon of war.... [Dennis Hart Mahan and others taught a] “system of tactics” ... at West Point, based on a theory of war as a science.... [It] was maintained deliberately as the dominant antebellum military doctrine, which, by the end of the Civil War, became foundational in American thought. This paradigm maintained faith not in natural individual genius but in collective acceptance of an educated, and therefore scientific way of war. (10–11, 16)

Hope’s book¹ combines intellectual and institutional history in a perceptive, well documented study of the sociology of evolving military professions.² Its structure is forecast in the elements listed in its subtitle. The author outlines a formal theory of war that differs sharply from the familiar Clausewitzian phenomenology. He parses in detail the meaning of “Military Science” in the pre-Civil War US Military Academy,³ when the term encompassed concepts of strategic movements or campaigning; the effects and manipulation of topography; the “arithmetic” functions of artillery, fortification, and practical engineering; and the organization, supply, and encampment of armies, that is, logistics and administration (5–6). Concentration of forces and celerity of movement were dominant principles (100–101). Hope traces this stress on the empirical to European, particularly French Enlightenment thought, quoting, for example, Pascal on the distinction between the mathematical and the intuitive mind (7). The so-called mathematical approach contrasted with European romanticism and the post-Napoleonic fascination with the nature of genius.

The author notes that Frederick II and Napoleon appreciated the value of calculation and study (8). An educated mind would ensure a practical grounding for the application of genius when it appeared, and an acceptable standard of performance when it did not (70–71). He also stresses the importance of an evolving lexicon of strategic thought (6, 228), noting, incidentally, that strategy was defined at West Point not à la Clausewitz, but according to Prussian theorist Heinrich von Bülow among others (43–44).⁴

1. Orig. dissertation Queen’s Univ. (2011).

2. The idea that the military was a model profession can be found as early as “Lectures of Chancellor [James] Kent,” *Atlantic Magazine* 1.2 (1824) 148–49.

3. Hereafter “USMA,” “Academy,” or “West Point.”

4. Von Bülow was the target of a withering 1805 review by Clausewitz: see Peter Paret, *Clausewitz and the State* (NY: Oxford U Pr, 1976) 91–92. On the question of the possible influence of Clausewitz’s ideas during the period, see Christopher Bassford, *Clausewitz in English: The Reception of Clausewitz in Britain and America 1815–1945* (NY: Oxford U Pr, 1994) 50–55.

Hope's masterful survey of the relevant French primary sources and their American interpreters is notable for his contention that the thought of Antoine-Henri Jomini did not shape the USMA curriculum as much as many have claimed. He admits that Gen. Henry Halleck, for a time Abraham Lincoln's General-in-Chief, was a strict Jominian, but downplays his influence on the Academy and Army compared to Dennis Hart Mahan's.

Hope argues that critics of antebellum theory are guilty of anachronism, ignoring the circumstances and policies the Academy and the theory were intended to support. He quotes Matthew Moten to the effect that historians have concluded that "When the profession needed men to concentrate on high-level problems of military policy and strategy, few were equal to the task."⁵ Hope responds that:

What is meant by this is that America missed the opportunity to create a Prussian-style general staff, a larger standing army, elite military colleges, conscripted reserves, and elaborate war plans for *la grande guerre* that could re-create Cannae against any foe. The West Point academy is here judged against the "high-level problems of military policy and strategy" of Europe, not the United States. (142)

The heart of the book concerns the evolution of key concepts and their diffusion within the Army by West Point graduates, specifically in the context of post-War of 1812 defense policies; Hope highlights President James Madison and Secretary of War James Monroe's "Third System of defense" and succeeding Secretary of War John C. Calhoun's notion of an "expansible army" (51–59). These were predicated on defending major Atlantic ports against attacks by sea through a network of sophisticated forts, built by military engineers, manned by coastal artillery, and reinforced by mobile regular forces or, in the event of a prolonged conflict, state militias and federal and state volunteers.

The author astutely explores the paradox that a small army in a relatively isolated, hence secure, nation, preoccupied with internal expansion, fortress construction, and constabulary operations against indigenes, nonetheless studied and planned intensively for a most unlikely continental war. He shows that this, on the face of it, counterintuitive focus paid off during the Mexican War (1846–46) and, ironically, after the Union descended into a long civil war.

Tracing "military science" to the Enlightenment and particularly French precedents explains much about the history of instruction at the USMA that historians often gloss over. Older Academy graduates like myself will appreciate Hope's meticulous explication of the "Thayer system,"⁶ much of which survived into the 1960s. The same may be said of his treatment of the Academy's practical programmatic stress on the basic tactics of the various arms and branches, French language facility (to enable reading of French military texts), mathematics, and engineering (77–105).

Hope posits that the Academy had such strong influence because it constituted the US Army's primary professional institution and the principal source of the officer corps of a small regular force. Its instructors and graduates wrote practical and theoretical works for cadet instruction but also a wider audience of civilian readers who were likely to be mobilized in times of crisis.

Academy-trained officers quickly became prominent in regular Army units of the line, as well as the professional staff (Bureau System) of the Secretary of War. Cadets had to master the basic principles and operations of all service branches, and graduates were regularly seconded to arms other than their own, notably the engineering corps and several bureaus. Hope's statistical analysis of the careers of West Point graduates shows that, at the outbreak of the Civil War, they already had considerable experience in higher administration and large-scale operations. The expertise of topographical engineers in operational planning is a case in point (136–38).

5. *The Delafield Commission and the American Military Profession* (College Station: Texas A&M U Pr, 2000) 55.

6. Col. Sylvanus Thayer, superintendent of the USMA from 1817 to 1833, is often called "the Father of West Point."

A Scientific Way of War will appeal to both professionals and lay persons with a serious interest in the US Army, its premier professional Academy, nineteenth-century American defense policy, the nature of a particular national approach to military theory and doctrine, and the professionalization of the American armed forces. Ian Hope makes the case for the importance of the study of the calculable part of war in pre-Civil War officer education and, implicitly, for its continued significance in professional education.