The Case of the Prussian General Staff

After Napoleon's defeat at Waterloo in 1815, Europe entered a long period of peace. Armies were cut back to small professional corps, and interest in military science waned in most nations. Only in Prussia (later to become Germany) did people study the crises of command that emerged during the last stages of the Napoleonic Wars, when mass armies took to the battlefields. In Prussia they addressed the question head-on: What would happen if war broke out again and huge armies -- made possible by the recent European population explosion and the mass production of arms -- once again engaged in battle? Napoleon's failure had shown that such armies could not be led in the traditional way. The Prussians concluded that military command and organization had to be completely revised (Ropp, 1959).

If Napoleon was the last Great Captain of history, then Helmuth von Moltke was the first Great Manager of the modern military era, Moltke took command of the Prussian army in 1857 and rapidly built up a new system based on the principle of using highly trained and interchangeable staff officers. These elite officers were trained in a war academy. Each year 120 young officers were selected from the whole officer corps on the basis of competitive examinations. Of these, only about 40 finished the intensive scholastic course of the academy. And of these graduates, Moltke selected only the best 12 to be trained for the General Staff (Howard, 1962).

In peacetime, officers cannot get real experience in their profession, so Moltke arranged for the academy to provide the next best thing: making battle plans for a great variety of hypothetical campaigns and analyses of past battles. By fighting battles on paper, young officers were trained in Prussian strategic and tactical theories. After their academic studies, officers chosen for the General Staff spent several years with Moltke at his headquarters and rode with him through a series of field maneuvers in which real troops participated. Then these officers were assigned a period of duty with a regiment. After that they rotated between assignments on Moltke's staff and regimental duty (Ropp, 1959).

The point of all this training was to overcome the inability of a single commander to direct a war fought with mass armies. Because the supreme commander could not be everywhere at once, the Prussians tried to create many "duplicates" trained to act as he would act. The decision of one leader could then be carried out "through the reflexes which he had already inculcated in his subordinates through previous training; so that, even when deprived of his guidance they should react to unexpected situations as he would wish, ... Thus the Prussian General Staff acted as a nervous system animating the lumbering body of the army making possible the articulation and flexibility which alone rendered it an effective military force " [Howard, 1961].

Between wars, the Prussian General Staff spent time looking ahead, planning in minute detail for future wars, and agreeing on proper tactics and strategies for various circumstances. When war came, each military problem was solved according to the overall plan and the approved methods. Thus, Moltke dealt with the overwhelming scale of modern warfare by training corps of subordinate managers he could count on to be not only his eyes and ears on the battlefield but also his brain.
While Moltke was creating an interchangeable set of military managers, he also perfected another military system that gave these managers standardized units to work with: the divisional system. Before the Napoleonic Wars, European armies were organized by armament and function. The cavalry, the infantry, and the artillery were separate branches of service and appeared on the battlefield as separate units under separate commanders. Coordinating these units was the task of the supreme commander of the army who arrayed these forces into a battle formation and then told infantry units where to march, cavalry units where to charge, and artillery units where to fire.

However, as armies grew, this system proved cumbersome. Under Napoleon, the French army began to break up into smaller units, each of which was an independent mini-army consisting of infantry, cavalry and artillery and capable of doing battle on its own.

These French formations were of varying size, and their makeup was never standardized. However, Napoleon’s British archrival, the Duke of Wellington (who in his long career never lost a battle) adopted this idea of mini-armies and created a standardized unit called the division. British divisions, being complete units, could be detached to fight as self-sufficient units, combined to form larger units, and interchanged. For example, a rested reserve division could replace a fatigued division in combat.

Moltke carried the standardization of Prussian divisions to the point that commanders could easily move from unit to unit. Each division was similar to the others in makeup, training, size, and structure. Indeed, Moltke’s divisional system was so detailed that each division had a specified number of spoons and cooking pots.

In 1871, Moltke tested his new military managers and his divisional structure in the Franco-Prussian War. During a lightning campaign, the Prussians utterly routed the much more experienced French army. The Prussians did not win because they were better armed, had more soldiers or were braver in battle. The French army was their equal in all these ways. But the French General Staff was only a group of messengers and clerks serving the commander, and the French commander could not control his far-flung armies.

Noting Moltke’s success over the French, all major nations soon copied his methods. Later with the advent of telephones and radios, commanders could better guide their subordinates in the field. But the principle of delegating command to officers on the spot, who are highly trained in a common military theory and in the command of standardized military units, has remained the only workable solution to the problem that overwhelmed Napoleon.


Samuels, Martin, Command or Control? Command, training, and tactics in the British and German armies, 1888-1918. Portland, OR: Frank Cass, 1995