



beyond
the
border

Fog & Friction

Teachers' Guide

Clausewitz Bio

Carl Phillip Gottlieb von Clausewitz (June 1, 1780 - November 16, 1831)

His father was a Prussian Officer and he entered the army at the age of 12. As field soldier, he first saw combat at age 13, and subsequently had significant combat experience against the armies of the French Revolution and Napoleon. He later assumed a great deal of political and military responsibility as a staff (non-combat) officer in central Prussia, and as an important military educator. He attained the rank of Major-General in the Prussian military at age 38, married into nobility, and wrote a number of treatises on military theory. While he is today most famous for his magnum opus, *Vom Kriege (On War)*, Clausewitz was an important figure in his time, having an important, if subordinate role in the rehabilitation of Prussia following its near-destruction at the hands of Napoleon in 1807-6, and even appears as a minor character in Tolstoy's *War and Peace*.

Summary of On War

Though a lengthy, difficult read, *On War* has nevertheless had a profound impact military thought. Perhaps most famous for introducing the notions of “fog” and “friction.” Fog refers to the uncertainty of war and the difficulty of gathering reliable information. Friction is more complex, and refers to how difficult it is to actually execute military plans—unforeseen problems inevitably pop up, and combine to thwart plans, delay movements, and turn the tide of battles. As Clausewitz described it,

Here the fog [referring to the weather, not the Fog of War] prevents the enemy from being discovered in time, a battery from firing at the right moment, a report from reaching the General; there the rain prevents a battalion from arriving at the right time, because instead of for three it had to march perhaps eight hours; the cavalry from charging effectively because it is stuck fast in heavy ground¹.

Clausewitz’s notion of friction also included the idea that these inevitable mishaps build upon each other, with each minor setback producing a series of additional problems. Even the lowest-ranking soldier, therefore, can have a significant impact the outcome of a battle. For example, suppose an army is marching on its way to engage enemy forces. If one soldier drops his weapon, and has to stop to pick it up, he not only delays his own progress, but that of the soldiers in his immediate vicinity by perhaps a minute or two. Furthermore, they may delay the units behind them as well. This delay, of maybe a minute, certainly does not represent a huge military setback. However, over the course of a long march, numerous incidents like this one—individual soldiers dropping their weapons, stumbling over obstacles, or otherwise creating small delays—may mean that the unit arrives at its destination hours later than its commander intended, and such a delay can easily be the difference between victory and defeat.

¹ *On War*, Chapter VII

Glossary

30 mike-mike	30 millimeter. A reference to the 30 millimeter cannon carried by the Apache helicopter.
Battalion	A military unit. Modern infantry battalions in the United States Military consist of around 500 soldiers. A battalion normally consists of three or four companies
Company	A military unit consisting of between 130 to 200 troops, which are divided into smaller units called platoons.
Corpsman	A U.S. Navy medic assigned to United States Marine Corps infantry units. In combat situations, Marines yell " <i>corpsman up!</i> "—an abbreviation for "corpsman up front"—to inform the corpsmen that their services are required.
JSTARS	JOINT SURVEILLANCE AND TARGET ATTACK RADAR SYSTEM. JSTARS is a complex array of equipment carried on a plane that flies over U.S. ground forces during major operations. JSTARS sensors gather data and information from a variety of sources, including on-board radar systems, and JSTARS relays it to commanders on the ground. JSTARS is designed to provide as complete a picture as possible of the battlefield—and is capable of determining the direction, speed and patterns of military activity of ground vehicles and helicopters
Platoon	A small military unit consisting of around thirty troops. Three or four platoons make up a company.
RPG	Rocket Propelled Grenade. A shoulder-fired rocket originally designed and distributed by the Soviet Union (and later Russia). The RPG is light, portable, is relatively cheap to produce and can be used against both armored targets (like tanks) and unarmored targets (like cars and people). It is one of the most popular weapons of guerilla and insurgent groups around the world.
SAW	Squad Automatic Weapon; a light machine gun that can be carried by one soldier.
Squad	One of the smallest military units on the battlefield, generally consisting of between eight and twelve soldiers. Three or four squads generally make up a platoon.
T-55	A Soviet-made tank fielded by a number of nations around the world. The T-55 is virtually obsolete, and is slower, smaller and more lightly armored than modern tanks (like the T-72). Its cannon is not powerful enough to pose a serious threat to the M1A1 Abrams tanks fielded by the United States Military.
T-72	A Soviet-made tank that was widely exported during and after the Cold War. The T-72 is heavily armored and carries a potent mix of weapons.

Additional Reading

On War. Carl von Clausewitz. 1832.

Considered by many to be the most important book on modern military theory.

The Art of War. Sun Tsu. Publication date uncertain; perhaps 453-221 B.C.E.

A classic of military theory, The Art of War is assigned reading to military cadets to this day. Among other topics, the author addresses the effects of troop fatigue, morale, weather, and other sources of Clausewitzian friction on combat operations.

The Prince. Nicolo Machiavelli. 1515.

Though often regarded primarily as a treatise on politics, Machiavelli nevertheless addresses significant points of military theory and is regarded as one of the cornerstones of modern military thought.

Makers of Modern Strategy from Machiavelli to the Nuclear Age. Peter Paret (Editor), Gordon A. Craig (Editor). 1986.

A thorough examination of the evolution of modern military strategy, this book is an invaluable resource for students of the subject.

How to Make War (Fourth Edition) : A Comprehensive Guide to Modern Warfare in the Twenty-first Century. James F. Dunnigan. 2003.

A remarkably detailed treatment of the myriad factors that influence military operations, and how they influence strategic decision-making.

Black Hawk Down: A Story of Modern War. Bowden, Mark. 1999.

This journalistic study of the Battle of Mogadishu, where 18 American soldiers were killed in a vicious urban firefight with Somalian guerrilla fighters, provides a remarkably detailed case study for the effects of fog and friction on combat decision-making and consequences.

Relevant Websites

<http://www.clausewitz.com>

Extensive site focused on Clausewitz, his life and his work. Includes timelines, summaries of *On War*, and a teaching guide.

<http://karl-von-clausewitz.wikiverse.org>

In addition to some basic biographical information on Clausewitz, this includes a number of media references to Fog and Friction in recent coverage of the war in Iraq.

<http://www.strategypage.com>

“Comprehensive summary of military news and affairs, including battlefield reports.” Unfortunately, the analysis takes the form of short articles, and is therefore somewhat disjointed. Despite the difficult organization, offers analysis of current conflicts including Iraq and Afghanistan.

<http://www.csis.org/features/warupdate.htm>

The Center for Strategic and International Studies offers a running list of articles related to the campaign against terrorism. Access to some content in other areas of the site is fee-based.

<http://www.global-defence.com/2004/index.html>

While primarily focused on the defense industry, this site also offers ongoing analysis of the conflicts in Iraq and Afghanistan.