

# LETTERS

**To the Editor**—I have studied and applied systems theory for the last 40 years, encompassing three careers including that of a military officer. My advanced degree includes a specialty in the field of systems thinking. So I find it appalling that *Joint Force Quarterly* would publish such a completely misinformed piece as that by Professor Milan Vego (“Systems versus Classical Approach to Warfare,” *JFQ* 52, 1<sup>st</sup> Quarter 2009). How one can critique the field of systems theory and its related subdisciplines without referencing a *single work* that defines the field is sufficiently disquieting; how an esteemed quarterly such as yours can publish it is beyond belief. Either the editors are ignorant of the basics of the field, or they are coopted by the author.

Professor Vego starts with an encouraging premise: that the bastardization of the systems disciplines by the U.S. military is incongruent to the realities of war and warfare. Effects-based operations, the latest variant of the so-called Warden school, is far more representative of the American penchant for creative English (through invention of attractive slogans and acronyms) than serious systems theory (read Paul Van Riper’s commentary in this same issue). In fact, the distorted, even perverted American concepts of systems theory and thought as applied to war and warfare seem far more akin to the old continental ideas of “orderly battle” than the dynamic environments that they now are.

And this is where Vego, the historian, goes completely awry. In chastising American doctrine, he generalizes his critique to *all* systems theory. One of his comments, highlighted by the editors in the article, suffices to demonstrate his ignorance of systems science. He adduces that systems theory would include the “neo-Newtonian view of the world . . . that everything runs smoothly, precisely, and predictably.” That is completely the opposite of what systems theorists have discovered and published, believe, and practice. In fact, if Vego had bothered to do the *slightest* research in this field, as it applies to the military, he would have found what systems thinkers believe in Barry Watts’ classic monograph, *Clausewitzian Friction and the Future of War*, or Tom Czerwinski’s collection of essays, *Coping With Bounds: Speculations on Non-Linearity in Military Affairs*, or Alan Beyerchen’s classic article,

“Clausewitz, Nonlinearity, and the Unpredictability of War” (*International Security*, Winter, 1992–1993). These treatises are well known among systems thinkers and theorists interested in military affairs; they are also known to many professionals in the military.

Alternatively, if Professor Vego had wanted to critique systems theory from some of its source documents, he could have accessed the many works of scientists and philosophers such as Russell Ackoff, C. West Churchman, or Carl von Clausewitz. We systems theorists believe that Clausewitz, so ahead of his time, was one of the first systems philosophers on the subject of war. Vego has created a false god in his view of the systems approach (“*the*” approach does not exist), and then broken his phantom icon to his own applause.

In fact, his last section, dealing with operational thinking and vision, is completely consistent with the way systems thinkers view war and warfare. I know because I now teach operational art, using Vego’s own book on the subject, and applying my systems knowledge accordingly.

You, dear editor, have been had. Unfortunately, so have your readers.

—Jonathan E. Czarnecki, Ph.D.  
COL (Ret.), USA  
Professor of Joint Military  
Operations  
Naval War College Monterey

**To the Editor**—I was unpleasantly surprised with both the tone and content of Professor Jonathan Czarnecki’s letter. Professional discussion should be free of ad hominem attacks.

My article, as its title implies, was focused on comparing systems and classical approaches to warfare. I have never intended to provide a critique of systems theory in general. My use of the terms *systems* and *systems approach* clearly refers to the way systems theory is being interpreted and applied by leading effects-based operations (EBO)/systemic operational design proponents. This is also shown by repeated use of the terms EBO *enthusiasts* or *proponents*. My article was based on numerous sources, including writings of some leading systems theorists.

It is simply false to claim, as Professor Czarnecki does (and many systems theorists as well), that Carl von Clausewitz was one of the first systems philosophers of war. He was not. Clausewitz’s writings cannot be reinterpreted in terms of systems theory, which originated first in biology in the 1920s—that is, some 90 years after Clausewitz died. In fact, he was vehemently against using rules, principles, or systems in the study of war. In his seminal work *On War*, he wrote:

*Efforts were . . . made to equip the conduct of war with principles, rules, or even systems. This did present a positive goal, but people failed to take an adequate account of the endless complexities involved. As we have seen, the conduct of war branches out in almost all directions and has no definite limits; while any system, any model has the finite nature of a synthesis. An irreconcilable conflict exists between this type of theory and actual practice. . . . [These attempts] aim at fixed values but in war everything is uncertain and calculations have to be made with variable quantities* (Howard and Paret, 1993, 154–155).

A prominent systems theorist concluded Clausewitz believed that it was desirable to develop a system of principles for the conduct of war but that goal was unattainable. However, one cannot possibly read the above statement and conclude that Clausewitz was somehow a systems thinker. He wrote on friction and linearity/nonlinearity of war, but not in terms some systems theorists use to explain his writings today. In fact, Heinrich Dietrich von Buelow (1757–1807) and other followers of the so-called mathematical or geometrical school so predominant prior to the French Revolutionary and the Napoleonic Wars had much more in common with some aspects of systems thinking. Not by accident, Buelow’s main work was entitled *Spirit of the New System of War* (*Geist des Neueren Kriegssystems*). Like many systems proponents, and EBO advocates in particular, Buelow overemphasized the importance of quantifiable factors in warfare and neglected such factors as political intentions, morale of the army, psychology of the commander, and irrationality.

One does not need 40 years to conclude that systems theory cannot be applied to such

enormously complex human activities as warfare. That does not mean that some parts of such theories cannot be applied to the military domain. Advocates of the systems approach need to prove practical utility of their theories in the conduct of war, and in operational warfare in particular; otherwise, they will deservedly meet the fate suffered by all pseudo-scientific theories of past eras.

—Milan Vego, Ph.D.  
Professor of Operations  
Naval War College  
Newport, RI

**To the Editor**—There is a proposition that makes its appearance in military discussions on a periodic basis—the quick, decisive victory. Usually the forcing function for this proposition is the historical record of warfare. Here is how it looks: a genius comes along, wins a particularly elegant battle, campaign, or war, and not long after, erudite theorists gather to capture the essentials of his “method.” Or to sell books. There is nothing inherently wrong in this approach toward war; however, capturing the universal essentials that lead inevitably to victory is probably a vain pursuit since each situation has its own essentials. Carl von Clausewitz himself scorned “strategic clichés” and “jargon, which . . . bears only a faint resemblance to well defined, specific concepts.” Learning from history was something Clausewitz advocated, but not in order to find a silver bullet that guarantees success.

The story of military theory is littered with just these sorts of attempts. But the short, decisive war with a tidy ending is rare, if not nonexistent, in recorded history. The most recent manifestation of this pursuit is best described as “domino warfare.” This approach to war is characterized by the achievement of military success through finding the magic action that will cause a cascading series of subsequent events (or effects) that lead to military success. In theory, a carefully focused attack, or series of attacks, causes the enemy to lose both his control and composure on a broad systemic scope. As the dominos fall, they quickly result in a broad psychological paralysis which translates—somehow—into a political or national capitulation. Such a fortuitous result reduces or even eliminates the

need for attritional warfare. The very rapidity of victory causes the mass of the people to face the facts and accept the inevitable. When domino warfare is tied to an attractive worldview (or ideology), the postwar situation will take care of itself as the repressed universal values of “the people” emerge and align themselves with those of the victors. Of course, these sorts of assumptions are so much empty nonsense, as recent military history in Iraq, the Balkans, and Afghanistan suggests. The efficacy of domino warfare, however, seems to retain its allure.

Domino warfare has fundamental conceptual errors that are now being comprehensively examined, and it may be the wrong tool to solve most problems. Its most recent manifestation seems to consist of three related concepts: effects-based operations (EBO), network-centric warfare (NCW), and finally systemic operational design (SOD). First, there is the issue of so-called EBO. This particular concept got its start at the operational level of war. EBO is the ideal bumper-sticker for domino warfare adherents. In its original form, EBO targets a relatively simple system, such as an electrical grid, a water management system, or even a telecommunications network. The effects produced can be predicted and factored into the design of the campaign. However, the problem with EBO is that it became an oxymoron. It became effects-based operations *warfare*—thus graduating from an operational approach to a whole way of war unto itself, with its own taxonomy and logic.

The next concept contributing to a domino warfare mindset is NCW. Like EBO, NCW began as a simple construct: use the latest information and space technologies to rapidly gather target data for employment in the less complex maritime environment (as regards human terrain). The concept was at its most coherent for an air defense related problem that rapidly synchronized the sensors and weapons in Navy battle groups. As air defense systems rapidly expanded in tandem with information technologies, NCW came to encompass just about any networked system. Again we see the misuse of language as jargon contributing to the inflation of modest operational concepts into “an emerging theory of warfare.”

Finally, there is the issue of SOD. This approach has its genesis in the airpower

theories of the 20<sup>th</sup> century and the elegance of delivering rapid strategic decision from the skies. War would come and those with airpower, against which no defense was possible, would win it. At the U.S. Army Air Corps Tactical School at Maxwell Field, the heirs to Billy Mitchell and Mason Patrick refined an approach that focused on the arrangement and interrelationship of the metaphorical dominos, the industrial system of a potential adversary. After 6 years of bloody combat in World War II and the fielding of an atomic bomb, victory did come—but not quickly. More recently, SOD, when applied to complex human “systems,” has proved particularly ineffective in Iraq, Lebanon, and Afghanistan.

Domino warfare encompasses the age-old desire to find the quick military-political victory through some technological or intellectual shortcut or combination of the two. The problem is that complex human systems do not lend themselves well to this approach. Things happen unexpectedly and often slowly in the human domain. For these reasons, domino warfare outcomes are best left to the realm of serendipity as one instead plans for a long chess tournament.

—Dr. John T. Kuehn  
Associate Professor of Military  
History  
U.S. Army Command and General  
Staff College

**To the Editor**—Although I do not agree with everything Ralph Peters wrote in “Trapping Ourselves in Afghanistan and Losing Focus on the Essential Mission” (*JFQ* 54, 3<sup>d</sup> Quarter 2009), I commend him for reducing a complex issue to an understandable solution by answering the questions: (1) Where are we? (2) How did we get there? (3) Where are we going? Essentially, LTC Peters wrote, first we are in Afghanistan. Second, we went there to neutralize al Qaeda after the attacks on 9/11. Third, with al Qaeda neutralized in Afghanistan, where are we going by expending our resources in fighting the Taliban and nation-building when we have bigger fish to fry?

—LtCol Fred L. Edwards, Jr., USMC  
(Ret.)