Commanding Military Power

Robert L. Bateman

I distinctly recall the warning given by my first instructor in computer programming. "Remember," he said, "the computer will do exactly as it is told. It will 'compute' any values you place into it, in exactly the manner that you tell it to. So if it's garbage that goes in, it's garbage that comes out." I did not know at the time that this is such a truism among computer scientists that it even has an acronym, GIGO.

War By Numbers, written by the head of the DuPuy Institute Christopher Lawrence, consists largely of graphs and charts that purport to demonstrate the effects of various factors upon combat success ratios. The book does not attempt to develop a new theory of war, per se, but claims that, its author "establishes what we know about conventional combat and why we know it. By demonstrating the impact of a variety of factors have on combat he moves such analysis beyond the work of Clausewitz and into modern data and interpretation" (back cover). No matter how you slice it that is a pretty lofty claim.

Unfortunately, in reaching for this "understanding" Lawrence exclusively uses databases created by the DuPuy Institute and formulas that are uniquely their own. And that is the insurmountable problem with *War By Numbers*, one that undercuts any claim it might have to move beyond Clausewitz. In this book there is a near complete lack of transparency and, therefore, also of reproducibility of the research or the means of analysis. The endnotes that do exist (and some chapters have only five or eight) are almost completely self-referential to yet other DuPuy Institute studies (available for a fee of course). In other words, we cannot tell what has gone into their computer analysis at all, and we have no insights as to what their computer algorithms may be. Thus, we cannot tell if there have been any mistakes, we have no idea what the quality of the research supporting those databases might be, or in almost all cases even what the original historical sources might have been. All of this information is proprietary to the institute, and if you want access, it will cost you tens of thousands of dollars, though what a customer might get for that money is unclear.

Like Isaac Asimov's character Hari Seldon and that other wonderful manipulator of reality, the *Wizard of Oz*, Lawrence hides his workings (and data) behind a curtain. In essence what he has done is produce charts and tables that show how the DuPuy Institute's computer-based projections match the "historical reality." But there is no way to determine if there is real and viable source material underneath these projections, or if some of the numbers have been fudged in order to make the outcome appear to match what they alone declare was the historical reality. Thus, a reader is effectively required to believe their de facto assertion, "trust us, we know more than you do."

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In short, what this book amounts to is a massive piece of corporate advertisement for the real money-maker for the Dupuy Institute, their contracted studies. It is a 374 page infomercial. But the kicker is that it is one that you are expected to pay for the privilege of reading.

In distinct contrast, there stands a new work of theory. It is supported with reproducible research, as well as a call for other academics to further the examination of the theory through the case studies presented. Ryan Grauer's *Commanding Military Power* is a solid work fusing evidence with a theory that seeks to explain. It is a book that professional soldiers, academic historians (and for that matter amateur historians), international relations specialists and politicians should read, consider, and as far as possible replicate and develop.

One of the most fruitful methods of advancing our incomplete understanding of war, in all permutations, is to introduce new intellectual concepts borrowed from other fields to help us make sense of the chaos of war. Clifford Rodgers quite successfully advanced the understanding of "military revolutions" by importing the genetic/biological idea of "punctuated equilibrium" in the 1990s. Clausewitz himself borrowed from then-developing ideas from the field of physics when he used the concept of "friction." Now Grauer, leaning upon the work of organizational theorists, (a field which heretofore dealt almost exclusively with business, economics, and political science) does the same to great effect.

In *Commanding Military Power*, Grauer initially observes that "from a theoretical perspective, no extant model of military power incorporates armed forces capacities to cope with and overcome the effects of uncertainty in combat" (9). To fill this gap he proposes something he calls "command structure theory." Simply stated, Grauer proposes that the best way to examine historical conflicts is to study and analyze the means that armed forces used to organize and manage information and uncertainty on the battlefield. This method, he argues, allows one to understand how much combat power that force may be able to generate in a given conflict. By adjusting components of command structure, such as the ratios of subordinates to leaders, the degree of centralization in decision making, and the communications network used to transmit and process data, a military force can match its structure to the particular environment in which it is fighting.

In developing his arguments, he examines four unique case studies, at least for Western readers. The first is a campaign from the Russo-Japanese War, the second is from the Chinese Civil War, while the third and fourth both come from the latter phases of the Korean War. Each case study is well researched, leans heavily upon primary sources, and is worth reading alone. But more importantly, because they are studies with reproducible research, they are open to critique and revision. Indeed, that is much of the point of the work. Grauer is explicit in this. Unlike Lawrence, he clearly invites readers and scholars to cross-check his work, unpack and engage with the theory he presents, and take that theory to the next level by applying it to other historical case studies for comparison and refinement. That is how scholarship is supposed to work.