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*A critique of military analysis***Learning from  
Master Sun**

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The quality of finished intelligence on Third World military forces is again an issue of concern. Before the Persian Gulf war in 1991, the Directorate of Intelligence (DI) commissioned an internal review of the training afforded analysts who report on the military forces of Third World countries. During the Gulf crisis, considerable discussion focused on assessments of Iraqi order of battle in the Kuwaiti theater of operations, Iraqi capabilities relative to coalition forces, and Baghdad's probable military strategy. Subsequent post-mortems gave high marks to the military intelligence support, but debates raged over battle-damage assessment methodologies and the degree to which national intelligence agencies should support theater military commanders.

Meanwhile, postwar reassessments of Baghdad's conventional and unconventional weapons inventories and programs have fueled concerns about other potential Third World military threats, now highlighted by declining interest in Cold War military issues. As a result, policymakers, Congress, and senior intelligence officials are adjusting the amount of resources and attention given to Third World military threats. While these debates force us to evaluate the accuracy, clarity, and timeliness of our products to determine how well we produce military intelligence, we should also take the opportunity to revisit how we perform this vital function.

**Sun Tzu: Greater and Lesser Matters**

The writings of Sun Tzu provide a useful point of departure to measure the research papers and intelligence assessments produced in the DI which are intended to be tailored to the needs of national-level policymakers. Sun Tzu's writings originally were

intended to educate and advise such leaders in the fundamentals of warfare. They are particularly appropriate for evaluating our work because they focus on issues related to grand strategy, as well as the operational and tactical concerns of the uniformed military. Their importance and timeliness have been widely recognized and incorporated into the texts of contemporary military scholars and war colleges. Samuel B. Griffiths, for example, favorably compares Master Sun to more familiar modern military thinkers, such as Clausewitz, and notes his continuing importance:

Sun Tzu attempted to establish a realistic basis for a rational appraisal of relative power. His perception that mental, moral, physical and circumstantial factors operate in war demonstrates remarkable acuity. Few military writers, including those most esteemed in the West, have stated this proposition as clearly as Sun Tzu some 2,300 years ago. Although Sun Tzu may not have been the first to realize that armed force is the ultimate arbiter of interstate conflicts, he was the first to put the physical clash in proper perspective.<sup>1</sup>

Sun Tzu's criteria for evaluating military forces provide a useful framework for analyzing contemporary military trends and events. They begin with five "matters"—morale, generalship, terrain, weather, and doctrine—that Sun Tzu recommended be deliberated in the highest councils. Only if superiority in these matters was clearly indicated did he recommend discussion of five other issues—numerical strength, quality of troops, discipline, equity in the administration of rewards and punishments, and training—all of which he considered to be of lesser importance.

Applying these criteria to the war in the Gulf, for example, one might have been less surprised by the overwhelming victory of the coalition forces. Before

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the war, Sun Tzu might have argued in order of importance:

- That after nearly a decade of war with Iran and with poor military leadership, the Iraqi Army was far weaker than its numbers and arsenal suggested.
- That the terrain and weather favored doctrines emphasizing air power and highly mobile ground forces over static defenses backed by reserves.
- That highly skilled and better trained coalition troops and pilots would have easily bested their Iraqi adversaries.

If Sun Tzu were alive today to sample of our research papers, intelligence assessments, and reference aids, he would probably have a mixed opinion of our military analyses.<sup>2</sup> He would be pleased that each paper on Third World militaries published in the last four years typically addressed or at least mentioned five to seven of his criteria. While it is impossible to say that a magic number of these issues should be covered in a single paper—some might appropriately focus on just one—it probably is fair to say that most of our national intelligence hardcovers should cover a fair number. Which ones, however, is an issue of greater importance, and the Great Master would be displeased with how often we ignored the five “matters” and focused heavily on the lesser indices of military capability. A review of these criteria, in his order of importance, illustrates our strengths and weaknesses.

**Higher Matters**

**Morale**, the first and most important of Sun Tzu’s criteria, is addressed in slightly less than half of our papers. These include papers that evaluate morale within the uniformed ranks as well as civilian support for military establishments and operations in Third World countries. Sun Tzu’s use of the term in the latter sense was most recently reflected in

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With morale mentioned in half of our papers, it is difficult to tell whether the glass is half full or half empty, but the importance Sun Tzu placed on this issue suggests we should do more. The biggest deterrent to focusing on morale within the ranks is the difficulty in measuring it and the consequences of wrongly believing that it is low among the armies of potential adversaries.

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Assessing civilian morale is equally difficult in countries with vigorous internal police. The anecdotal grumblings about shortages of public services, food, and consumer goods in wartime economies are seldom convincing.

**Generalship** is given about the same amount of coverage in our papers. We write about military leaders and leadership slightly less than half the time.

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maps probably suffice in the eyes of many analysts and managers, who intuitively doubt that policymakers would be interested or should be informed, for example, that the sand in a particular desert will not support wheeled armored vehicles.

Even fewer have focused attention on the **weather**. A rare reference to the effects of weather on military capabilities,

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The rarity of such remarks is somewhat surprising, in view of the attention given to US air operations that were disrupted by inclement weather. By implication, foreign military forces and operations seem to enjoy an immunity to atmospheric disturbances, such as the sandstorms in the Iranian desert that helped abort the hostage rescue operation in 1980, and, more recently, the bad weather that temporarily curtailed the bombing campaign against Iraq.

In contrast, what Sun Tzu referred to as **doctrine**—the marshaling of the army in its proper subdivisions, the gradation of officers, the maintenance of roads by which supplies may reach the army, and the control of military expenditure—was covered in two thirds of DI military analyses. The typical paper gives the reader at least background information on the organization of foreign military services, and some, such as [Redacted] provide an in-depth look at personnel strength, organization, equipment inventories, and the chain of command of an entire military, down to the battalion level. Others, such as [Redacted]

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[Redacted] focus on the structure and composition of key military units.

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**Terrain** is examined about 20 percent of the time, most often in papers that examine detailed operational issues:

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Again, this shortfall is partly educational, but it is to a greater extent bureaucratic. Most military analysts have academic backgrounds in political science and history, not geography, a bias probably reinforced by the preferred disciplines of their managers. Our cartographers and geographers inhabit completely different niches in our organizational structure and have limited contact with military analysts, who believe they only need the former to make maps. And the

The weakness in our coverage of doctrine is that we focus heavily on combat units, paying scant attention to logistic questions, which Sun Tzu grouped under the heading of doctrine. References to logistic issues, in fact, seldom venture beyond the phrase “shortage of spare parts.” Several papers that examine two critical Third World regions are notable exceptions to this trend:

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While such papers do not provide a complete estimate of the force deployments in either of these critical regions, unlike other papers that try such ambitious assessments, they take a necessary hard look beyond frontline combat deployments.

**Lesser Issues**

By and large, DI analyses of Third World military forces emphasize factors that Sun Tzu regarded as matters of lesser importance, beginning with the **number of troops** and weapons, which appears in virtually all DI research papers and intelligence assessments surveyed. Whether considering national force structures, individual services, or specific units, we take great pains to give policymakers an accurate count of enemy or friendly forces. In some cases, as

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in [redacted] military postures are assessed in light of standing forces, reserves, commitments elsewhere, mobilization schedules, and combat-readiness rates. Such papers take static order-of-battle data and adjust them to provide readers with more realistic present and projected opposing force ratios. Other papers, which as [redacted] take a "forces analysis" approach to assessing the capabilities of a national military service, determining whether its existing or projected order of battle, as qualified by other factors, could achieve sufficient "mass" for successful operations, in this case [redacted]

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In addition to the "forces analysis" approach that begins with order-of-battle data, several other factors

emphasize the data richness of our analyses. Our reliance on imagery, for example, sometimes dictates that numbers take center stage: we count what we can as in [redacted] (b)(1) (b)(3)(c)

Other times, accurate data is what the policymaker wants the most. [redacted] (b)(1) (b)(3)(c) (b)(3)(n)

[redacted] Cultural and educational biases also help explain our emphasis on numbers—not surprising in a society where statistics cover the sports and business sections of the paper and where behavioral methods courses can be substituted for foreign language requirements toward college degrees. More important, data on men and arms bolsters the image of objectivity and precision in our analyses, qualities that we prize as an institution. "Numbers do not lie" probably is believed more often than "lies, damned lies, and statistics" for reasons mentioned above. Presenting "just the facts" also saves us the trouble and risk of relying on the more elusive criteria of morale, generalship, and the effects of terrain and weather in evaluating foreign military forces.

Two thirds of the time, DI military analysts modify their estimates of manpower and weaponry by assessing the **quality** of the individuals and arms in Third World military forces. Discussions of quality of manpower are regularly included in assessments of air, ground, and irregular units such as militias:

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Quality of arms receives as much, if not more attention.

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Such papers sometimes make use of well-developed methodologies, including measures of effectiveness, that push our analyses toward seemingly pristine quantitative judgments about technology and away from looking at the quality of troops, which, like morale, is a more difficult target. It is much easier to measure the capabilities of T-72 tanks, even different variants of T-72 tanks, than it is to evaluate the soldiers who operate them.

Two factors related to the quality of troops, **discipline and the administration of rewards and punishments**, are considered less than 20 percent of the time.

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A wider coverage across all Third World regions is given to **training**, Sun Tzu's final criteria for evaluating military forces. Slightly more than half of our papers mention or stress its importance. One of the

better examples is

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More typically, training is addressed toward the end of papers as a secondary topic.

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Training probably has received, at best, a satisfactory amount of attention. Although one of Sun Tzu's lesser criteria, training has become more important with the introduction of higher and higher levels of technology on the battlefield. Moreover, it is an issue that requires even more attention as shrinking defense budgets and force structures push Third World militaries toward fewer but better weapons that require more intensive training.

### Looking Ahead

One explanation for the overall emphasis in our papers on Sun Tzu's lesser matters, and a caution that it is a trend likely to continue, is what we might call the "peacetime" demands of military intelligence. National-level policymakers interested in Third World militaries often only need a thumbnail sketch of a particular country's armed forces that can be summarized in tables on weapons inventories and national-level deployment maps using icons of armored vehicles, soldiers, ships, and aircraft. Those with a keener interest are often thinking about security assistance. Like any budgetary issue, this assistance is best addressed with intelligence that emphasizes equipment and training needs of our friends based, in part, on the arsenals and capabilities of potential adversaries. And in negotiating the appropriate level of assistance and other forms of military cooperation with foreign counterparts, these same policymakers are more likely to want to know more about their counterparts' personal attributes than about their military acumen.

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Higher matters come to the fore when US or allied forces enter a potential or real "wartime" situation. Suddenly, the morale of opposing and allied forces, military skills of their generals, the specific terrain and weather, and more detailed knowledge of deployment patterns and logistic capabilities become more important. Unfortunately, when such crises arise, there is usually little time to research and analyze these factors, particularly in Third World regions. It is important to note that the Persian Gulf crisis was forgiving in this regard, given the five months of lead time before the coalition offensive, and the expertise on Iraq that had been built up during Baghdad's long war with Iran. The Intelligence Community as a whole generally has spent far less time and effort on Third World military analysis than it has on understanding US-Soviet strategic and NATO-Warsaw Pact theater forces.

ment patterns and avenues of advance, anticipating how Third World forces might try to maneuver before and during a conflict.

- Analyze how well Third World militaries maneuver in training exercises, peacetime deployments, and military operations and how the element of surprise might effect this and other criteria.

With these correctives in mind, we should not lose sight of the fact that the collective body of DI military analyses contains useful approaches to handling all of these issues. This could be particularly important in looking at traditionally stable areas of Europe and the former Soviet Union in the post-Cold War era. Freed from the constraints of Soviet control and the NATO-Warsaw Pact confrontation, new governments, national military forces, local militia, and insurgents will probably become increasingly similar to militaries in the Third World. The flavor of this transformation and one analytic approach can be found in

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As noted above, our analyses too often emphasize how large numbers of troops are organized and armed (but not how they are supplied). Less attention is paid to how well they are motivated and trained, and even less to how well they are led. By and large, we leave policymakers with the image of robotic military forces fighting on a level playing field on a sunny day. To correct these impressions, we need to:

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- Factor in key terrain features and weather patterns that would affect operations. In many cases this would go a long way toward explaining deploy-

**NOTES**

1. From *The Art of War*, translated by Samuel B. Griffith; Oxford University Press; 1963; p. 34.
2. This essay is based on a review of more than 50 hardcovers on Third World military forces produced in the DI between 1988 and 1991. Papers that focused exclusively on conventional arms transfers or the proliferation of weapons of mass destruction were not surveyed.
3. The writings of more modern theorists, including Clausewitz, Jomini, and Douhet, form the basis of our "forces analysis" concept, which begins with order-of-battle data and goes on to analyze operations and to project capabilities. Although many senior military analysts hold "forces analysis" to

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be the central core of our analytic capabilities, our papers also show a skewed treatment of the principles of war that have been distilled from the writings of these leading modern military theorists. We spend more time describing and analyzing military objectives, offensive potential, ability to mass forces, and unity of command problems (interservice rivalries), than considering how well Third World forces handle simultaneous threats (economy of force), maintain security, achieve surprise, or maneuver on the battlefield. Moreover, we are far more inclined to analyze individual Third World air forces than armies, despite the conventional wisdom that ground forces ultimately determine the outcome of wars between Third World countries.

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