



# *The Moral Imperative of Our Time— Purposeful Intellectual Growth: Developing and Using the Human Mind to Outthink America's Enemies and to Stay Abreast of Changing Technologies*

by Wayne Michael “Mike” Hall

Reviewed by John W. Smith

Palmetto Publishing, 2024, 448 Pages

ISBN-13: 979-8822935938

*The Moral Imperative of Our Time* is about improving thinking. Anyone who has read one of Mike Hall's books understands that is the driving force in his work. His life force, his vision, is to be a key influencer of both the development and commonplace acceptance of a “twenty-first century altered state of thinking.” This is the latest in a series of six books; each one contributes to bringing that vision to reality. This one is a series of five essays that update some of his earlier writing to address the increasing influence of the information age along with the implications of exploding new technology and their combined impact on how one might—should—think about fighting and winning on yet-untested—in some cases not-yet-imagined—21<sup>st</sup> century battlefields.

As a warm-up to digesting and embracing his thinking about intellectual preparation to win in this century's competitive environment, the reader can take comfort in the reality that there is no single person in the current generation of military thinkers who brings more credibility to the task. Credibility has several fathers; it can be born of what people think, what they say, and what they do. The author has distinguished himself in each of these categories over a lifetime as an intelligence professional.

As a junior Army intelligence officer, his baptism was naked exposure to the reality of his new profession: supported commanders expected consistently superior judgments from their intel guy—judgments that would confidently enable superior decisions and thus regularly lead to good prospects for mission success. Simple, right? That has been the job from the days of Clausewitz; it still is the job. The problem is just this: making it all come together into a coherent, complete, “perfect” intelligence picture is not trivial. Complicating factors abound: the enemy—the competition; the means to gather data and information; quality thinking to make sense of what you think you know...and don't know; the savvy and judgment to know what matters; adequacy of support from the larger “institution” or too frequently lack of it; and the ability to work through the various complexities and impediments to provide the commander or decision-maker with the “perfect” product...on time.

In a military career that spanned over three decades, be assured that the author experienced not only straightforward intelligence problems but some of the most perplexing, hidden puzzles. His lived experience speaks volumes to his credibility. Mentoring subordinates along the way added to his broader esteem and license to speak with authority. In this, the “give-back” phase of his adventure, the author has attracted attention across the intelligence and national security community. He is arguably the single best authority to speak about the influence that “thinking” will have on modern warfare—warfare that is unfolding before our very eyes at an unprecedented speed and with a momentum that will have implications for the military and the nation that extend beyond what anyone is talking about or doing anything about right now.

It is important to note that this book is a capstone to his previous work. Considered together, his efforts are rooted in a philosophy that “will anchor both people and organizations to the ground in the hurricane of change.” The “hurricane of change” is the author's perspective that we are at war in an ongoing competitive environment that differs from earlier wars. War now and for the foreseeable future will not be limited to what is considered to be traditional combat power. It will be characterized first and significantly as mental combat—a war of wits. Winning remains the focus, but the new battlefield is akin to “a play in motion.” The context of mental combat, as such, will present infinite complexities including nimble, passionate, intelligent enemies often enabled with technology as capable as ours. And significantly, the battlespace will not always be defined by things than can be seen, located and killed, but first signaled by insightful “reads” of intangibles, “reads” executed by thought warriors who are able to gain and maintain control, of the “intellectual high country.”

These new hurdles, opportunities, challenges—call them what you will—helped guide the author toward his theory of intelligence—a vision of the “whole” needed to wage and win mental combat. A few key pillars shape his theory—some old with a new twist, some new, all significant. Central to his theory: “will;” purpose; the vital-to-grasp relationship between data-information-knowledge and understanding. He also advocates the need for two new domains of war—vertical domain silos (an information domain and a cognition domain) that each represent combat power as much as the existing domains of war. Further, he proposes change to the three traditional doctrinal levels of conflict—splitting the strategic level into two new ones: resulting in tactical, operational, strategic (military) and strategic (policy).

Threaded through these theoretic pillars is his relentless focus on how to think better and his never-at-rest exhortation that winning for the intel guy always involves aiming for the impossible-to-reach yet nonetheless nonnegotiable goal of “perfection.”

Easy, right? Not quite.

To the soundbite crowd, eager for one-size-fits-all simplistic solutions, Hall’s in-depth treatment and explanation of the need for a philosophical, theoretical under-pinning might seem excessive. But it is the bedrock foundation for all that follows: conceptualizations; definitions; thought models; priceless visualizations that lead the dedicated thinker through a maze of complexity not to an approved solution, but instead to the intellectual high ground needed to confront all such difficult thought problems in multiple contexts. Particularly noteworthy among the detailed approaches that a serious thinker might put to immediate use is his 14-step thought model on what it takes to define and successfully impose one’s “will” upon a thinking enemy. Central to and running from beginning to end of this thought model is one’s “purpose.” As the author ponders “what one can do about the enemy’s determination and perseverance,” he offers: “purpose is preeminent because it provides the overarching rationale and moral ‘heft’ for conflict.”

While the preceding is useful, it remains abstract. Fortunately, a key feature of the author’s work is that he is not content to assert the relevance of abstract thinking without also leading the horse to water, so to speak. His commitment to help people “do,” to reach their intellectual high ground, is evidenced particularly in an entire series of other valuable thought models that permit serious thinkers to begin their own experimentation with the author’s approaches to improved thinking. His best implementation model? His advocacy for and description of an approach he labels “matrix war,” a matrix formed by the intersection of his proposed “new” domains of war with his modified levels of conflict. As envisioned by the author all such wars of wits will occur in one or several of these cells. Thus, the matrix approach offers a point of departure for the serious thinker to explore the relevance of a particular problem. Specifically, the approach enables high-level thinking about whether the presence of a problem affects “purpose,” and if so, why, how, and what might be done, from a “thinking” perspective, to mitigate or change its presence or impact.

While the author’s focus is squarely focused on improving the thinking necessary to help those in the thought trenches of mental warfare—analysts, commanders, policy makers—he also addresses another reality. Meaningful solutions to many hard intel problems implicit in today’s information- and technology-driven warfare reside beyond the purview of the practitioners of high-level thinking. In particular, the “institution” has a major role to play. The author articulates and confronts the challenges and impediments that the “institution”—both organizations and the people in them—pose to progress. He offers harsh criticism, and he rebukes the “arrogant,” “ignorant” that peacefully slumber. He appreciates that it is long-time respected organizations that have the authority, the means and the talent to bring improved thinking to bear in the form of doctrinal change, man-machine connections that routinely capitalize upon the power of both mind-blowing technology advances and the awesome power resident in the human mind. But he is perplexed. While he does not refer to these organizations and their denizens as troglodytes, it seems that this nasty label could be perched on the tip of his tongue. Their collective amnesia and avoidance of the need for better thinking—better thinking that can reveal itself as intangible, but real combat power—is virtually smothered by the “routines” of government and their self-satisfied, smug, vacuous outward-facing pontification, ineffective policies, and sadly short-sighted initiatives and investments.

The lines of discussion above are mostly developed and discussed in detail and represented in whole or in part in his previous books. The rationale behind this lengthy characterization of the author’s body of work has a simple, straight-forward explanation. Each of this book’s five essays includes in varying degrees the themes detailed in earlier books. But in this book, one profits from new perspectives emerging from the author’s never-at-rest brain. Some readers may find it useful to explore those earlier works. In most cases, this is easy to do, because the author liberally points the reader to his original discussions.

For readers who have not read any of his earlier work, *The Moral Imperative of Our Time* is a good place to start. The author, as characterized in the *Foreword*, writes for three purposes: to learn, to educate, and to persuade. Thus, this book reveals the maturation of some of his thinking from earlier work. In fact, it is refreshing to read in his own words how he has learned over time. For instance, in *Essay Four: A Vortex of High-Level Thinking—Q and A with a Young Analyst*, General Hall reveals his total commitment, not to selling a book, but instead to educating and persuading others to think better. In a dialogue that lasted over three years, the young analyst asked him: How did you develop the definition of “will” and its intricacies? In response, he said, in part:

*I did not seriously think about ‘will’ ... until I retired from the Army. ... I mouthed the word with something akin to willpower, but ‘will’s’ true meaning was not forthcoming. ... I looked in both Army and Joint doctrine for definitions and explanations but came up empty handed. ... I have worked seriously on defining ‘will’ since 2007. ... I have [improved it but] [t]he long road to attain a successful definition of ‘will’ remains a work in progress.*

A caution to readers: For those of you who read the title of this essay and think about skipping it, resist the urge. It consists of 14 Q’s and A’s; half of them elaborate on the evolution of the author’s own thinking and the back-and-forth with himself as he reaches the point where he believes ‘will,’ and its offspring ‘purpose,’ if ignored, handicap not just analysts but their supported commanders.



Woven into the fabric of his exchanges with the analyst, the author introduces the subject of matrix war. But, in *Essay Five: A Discourse between a Master and Apprentice—About War Per Se*, he elaborates in great detail. He explains how various cells house centers of gravity (COGs), how COGs move and morph, and how, when considered as a whole, they can offer pure gold to a ‘thinking’ commander. The commander who uses the matrix approach to tease out the exact purpose of his mission, what matters and what doesn’t, will soon realize that it offers not just a point of departure for his thinking. Coming along for the ride, he will realize that it offers solutions to the hardest of thought problems—all hiding in plain sight. It will guide the thoughtful commander to understand precisely what kind of war he’s in, to refine his purpose, and in brief to think about and understand the “whole” before, during and after he makes a decision and takes decisive action.

The commander who employs the matrix approach as a guide to winning the battle of wits will soon find himself face-to-face with an unforgiving reality: to win, he must be able to move fast and seamlessly between domain silos and levels of conflict. Each cell houses data and information that can become knowledge...but only if he is able to access it, adapt to it and act decisively. The shallow reader might be tempted to breeze past this discussion as an unnecessary side trip to purposeful intellectual growth. Ignore the temptation. Mike Hall characterizes his treatment of these terms as “the heart of the essay,” adding there “is an absolute need to know the difference among data, information, and knowledge.” He goes on to explain—to both the commander and the institution—why that’s the case.

Data, information, and knowledge collectively represent an ever-present influencing factor on mission success or failure. But—but—to experience a “win,” also requires improved institutional engagement and support. The author characterizes what an institution typically provides as ‘macro’ or ‘micro’ solutions. At this point in time, he labels institutional support as outdated and largely macro—one-size fits all—solutions that do not work in the complex mission reality of mental war. Unchanged, such institutional support is akin to one hand clapping: there will be no applause for a winner, because there will be no winner. To get to the intellectual high ground, the institution will need to focus instead on enabling ‘micro’ solutions. The author urges institutional focus on three things. First, in the various school houses, there must be a decided shift from what-to-think to how to think. This is the central point of the book. In his *Epilogue*, Hall continues to hammer the point. He characterizes the existing military thinking environment as an “intellectual wasteland.” The way out, he says (p.382):

*...humankind must learn how to think and engage in serious lifelong learning as a matter of personal and cultural survival. It is a moral imperative to be a lifelong learner and a high-level thinker along with helping one’s subordinates and organizations learn and keep learning ‘how to think’ ....*

Second, the institution must give serious attention to current organizational designs that—instead of enabling commanders to move seamlessly up, down and sideways in matrix war—bureaucratically impede performance. Needed, he observes, are “agile,” “flexible” organizations. Third, the author exhorts the institution to take steps necessary to develop and deploy technology in a manner that can continuously bring data, information, and knowledge to bear for the commander as a “weapon system.” One approach he advocates is virtual knowledge environments (VKE). Such an initiative would provide analysts, commanders and other decision-makers access—on demand—to data and information that could become the

knowledge needed to inform superior analyst “reads” about the operational context surrounding a mission and thus inform a commander’s superior decisions. Although VKEs are easy to conceptualize, the lack of access to data and information is a critical—perhaps the critical—issue standing in the way of effective matrix war as described and envisioned by the author. Committed institutional leadership is “the” key to making such an initiative reality. This and other issues are discussed in *Essay Five*. For the serious, committed thought leader, the leader who knows that consistently winning mental combat is essential but does not appreciate where or how to start, reading *Essay Five* is a good place to start.



*Essay Two: Implications for Intelligence Collection—Irregular and Asymmetric Warfare* builds upon the author’s book, *Intelligence Collection: How to Plan and Execute Intelligence Collection in Complex Environments*. *Essay 3: A “Journey” to the Edges of Advanced Intelligence Analysis—2007-2014* also builds upon an earlier book, *Intelligence Analysis: How to Think in Complex Environments*. Both essays provide new insights and implications that build on the earlier books.

Together, these essays describe how the two main actors—analysts and collectors—must think about their job and what they must do as a well-oiled functioning team to enable a commander to both viscerally understand the context of his mission and to regularly make superior decisions. These are great essays for both analysts and collectors, because they offer the author’s latest thinking since the publication of his two books several years ago. Having said that, his two earlier books remain essential for analysts and collectors to have handy. They continue to offer thinking that is pertinent and timeless.

At a glance, the titles to these two essays might suggest they have little to offer commanders or the institution. Warning: do not skip them. Hall’s message and the tone of his message is aimed at both audiences. To see why, let’s back up and look at the big picture—the need to understand the “whole” that Mike Hall evangelizes throughout all of his writing. If the goal is to inform a commander’s superior decisions, it follows that assessments provided to him would likewise aim to be flawless. Despite the impossibility—due in large part to an enemy with a vote—of attaining “flawless,” that remains the timeless goal of any analyst-collector team. From the start, the pursuit of “flawless,” “perfect,” is a “mental phenomenon.” It is true as well that analysts “lead the fight for initiative.”

Thus, a thinking analyst would bring to his task a large dose of reality about how the world works. He would grasp that it’s his job to fully understand and explain to his commander the “logic of the mission’s operational context.” As part of “context,” the real world contains what the author labels “linear” problems—if-this-then-that problems. Many of those problems are complicated but eventually can be made to surrender to logic and analysis—given, of course the right data and information. Unfortunately, the real world—including the real world surrounding a commander’s decision-making—also includes nasty, complex problems. Hall calls them nonlinear complex adaptive systems, CASs.

For instance, while a commander might need to know how an enemy artillery unit continues to escape detection and avoid being located, linear factors certainly come into play: distance relationships and links (guns to targets, guns to fire direction, ...), patterns (movement times, movement routines, communication patterns, ...). Sorting out this kind of problem is in an analyst’s wheel house, and it promises to be complicated. But with time and the right knowledge at the right time, they might be solved. The same straightforward situation might, however, also become complex. Let’s say, communications indicators tend to vaguely locate the unit in the evening near the same town. Its communications interestingly also fall silent around the same time. A thinking, but frustrated, commander who directs his intel team (his analyst-collector team) to find out everything about the enemy commander might eventually unscramble the puzzle. They may learn from a host of sources that the commander lives in the town and is known to frequently return home in the evening. In such situations where possible but uncertain human behavior might help locate the enemy battery, the author views such problems as a complex adaptive system.

Complex problems thus are characterized by factors that extend beyond the linear if-this-then-that problem mold. The author goes to extreme efforts to detail factors that should be of interest to an analyst-collector team in their work to confront and understand such real-world linear and non-linear situations. Hall defines CASs as having links, relationships, causes, effects, patterns and more. He charges the analyst-collector team as central to accessing all relevant information, breaking it all apart—analysis—and reassembling it—synthesis—into a composite picture and, most critical, making the output of their effort available to the commander.

The brief description above is a straightforward, logical—but wavytop—laydown that should leave the reader with an appreciation of a simple fact. The task confronting the analyst-collector team varies from simple linear types of problems to complex ones that defy prediction. Nonetheless, simple or hard, their task is to corral knowledge of the whole. To do so requires their ready access to all manner of data and information from all types of sources that with analysis and synthesis

can be used to build a reliable picture, story, narrative upon which a commander can make a superior decision. The ability of an analyst-collector team to do this forms the basis for judging their performance—good or bad. Execution becomes the coin of the realm, and that is the hard nut that confronts mental warfare in the 21<sup>st</sup> century.

The author repeatedly makes the point that knowledge created by the intel team's access to data and information while often intangible is nonetheless quite real, essential combat power. Without a good picture of the operational—and especially relevant for institutional leaders, the bureaucratic—context, supported commanders and other decision-makers have been, are, and will continue to be acting in the blind. Commanders of combat units would never go into an operation knowing that their tanks or artillery had insufficient ammunition; effective, sustained fire power is essential to their mission success. Yet the same commanders too often—for years, for decades—have gone into battle with an analyst-collector team that fell short of being able to deliver expected, necessary intel-related knowledge “fire power.”

The Army, the larger Defense establishment and the national and service intelligence communities have by and large ignored the vital requirement to confront the main issues standing in the way of informing and enabling decision-makers of all stripes—commanders, policy-makers, institutional leaders. Each should have a superior understanding of the real-world contexts that surround the problems they wish to solve and thus the factors that shape their decision-making. Two key drivers demand immediate attention if combat commanders, policy-makers, and institutional leaders want to win in the technology-driven, information age that is everywhere today...a reality that only shows signs of continuing unabated.

General Hall explicitly addresses both.

First is the need for an intelligence enterprise. In his 2023 book, *Whispers from the Arrow of Time*, he elaborates extensively on the need to “[d]evelop and employ virtual knowledge environments” or VKEs described above. In this book's *Essay Two*, he introduces the *intelligence enterprise* as a vehicle to make them a reality. He states, “a distinct need exists for an intelligence enterprise that focuses intelligence support from the national level to the small unit tactical level.” His description of the need for a *hive mind* is a simple yet powerful notion. He describes it as analogous to preparing a beehive to move. Each bee requires information to perform its function—“stay with the hive.” Yet the performance of individual bees benefits the mission of the whole—move the hive.

The author describes the intelligence enterprise as a means to fulfill several purposes. Chief among them is the pursuit of a philosophy that “sharing is good.” Unfortunately, there is a mindset in intelligence organizations—particularly in national organizations—that they exclusively “own” data, information, and access to expertise resident in the organization. That dog won't hunt in today's increasingly competitive, information-, technology-rich mental war settings. The author rightly asserts, “Many minds working in a unity of effort toward a common goal constitute a force far superior to any one mind.”

So, one might ask, “Why not just do it?” Naturally, there are valid reasons to protect the sharing of everything all the time everywhere. But those reasons do not need to stand in the way of common-sense initiatives to better enable commanders and other decision-makers with an understanding of the context surrounding their various missions. The author makes an implicit, persuasive argument that the various U.S. service and national intelligence organizations that largely support narrow, isolated user communities, fail when examined from the perspective of the whole that could—and should—benefit from the country's massive investment in talent and capability that is essentially wasted by not being made available to the units and organizations that could and should benefit.

The way forward might not have been feasible just a few short years ago. Technology is available today to make the author's notion of an intelligence enterprise a reality. What's missing it seems is the will to move forward and a champion—or a few of them—to run with the idea.

The second key driver needing aggressive attention is an intelligence community-wide effort to improve the quality of thinking that persists throughout the intelligence community—especially by analysts. In the second half of *Essay Three*, the author includes a description of his take on a series of 52 two-week seminars for about 1250 advanced analysts. It is a compelling read; it captures, in close-up detail, two main themes that run through the book. First is the unfortunate fact that good thinking is scarce among analysts.

*As a confession, after fifty-three years of being an intelligence officer, I am worried. [M]any analysts neither think deeply, nor critically; many do not read critically (many don't read difficult subject matter at all), and many prove so consumed with organizational directed 'hair on fire' ... processes ... that they admit that they don't have time to engage in 'deep thinking'.... [T]hey do not know how to think via synthesis and holism, both essential to supporting warfighters in the information age.*

Second is the equally troubling fact that the institution's support is, in a word, inadequate.

*When an analyst fails to think, they have little hope of understanding the consequences of their actions. ... Without ... nimbleness of thought and cognition, the power inherent in advanced analysis lays [sic] dormant. ... But intelligence analysts cannot be blamed for this situation. They are wonderful people, full of potential and altruistic motives. The fault lies squarely with poor leadership and the mindless bureaucracies that tend, through powerful position and influence of bureaucratic administration, to debilitate creativity, innovation, civil discourse, and expansion of knowledge...*

Reacting to the above, the author advocates for thought leaders—commanders and individuals leading the institution—to do three things: they need to understand that they themselves need to be lifelong learners; they need to help subordinates learn with purposeful efforts and development programs; and they need to help their organization learn with the intent to “value human intellect” and “decry mediocrity.” The author sees these efforts as essential to prepare the analyst intellectually for the overarching task of understanding the operational context surrounding a unit’s mission and enabling him or her to actually deliver “knowledge firepower” to commanders. The author advances a system of thought with definitions, thought models, powerful visuals and illustrations to make his suggestions reality. So, what’s the problem, you might ask? Just like the way forward to fashion an intelligence enterprise boils down to leadership, so too does righting this ship.

Unit commanders—those in direct contact with their analyst-collector intel team—bear a critical responsibility to become one of two credible drivers of better thinking by their intel teams. The author hits the nail on the head: “Regardless of ... what needs to be accomplished to optimize analysts’ performances, the difficult part involves convincing people in leadership positions, who have a stake in the status quo of existing programs, to acknowledge that a significant problem exists.”

It is normal for commanders to undertake mission rehearsals of various aspects of a unit mission, perhaps at the operational level a deep strike assault, one focused on coordinating ground and air fires and other aspects of the mission. At the tactical level, an analogous rehearsal might involve infantry-armor maneuver formations. Why not do the same with the unit’s intel team? Would it not make sense for a corps commander to walk his intel team through the entrails of an enemy’s command and control...their likely reactions to the deep strike? Too frequently, such initiatives are never pursued, or if pursued they are coupled with force-fed, canned information instead of knowledge that can only be informed by having had access to experts and their real-world data and information.

In spite of such handicaps, it is incumbent upon unit commanders to maintain constant pressure on his intel team to deliver a complete picture of the situation surrounding his decision-making. And, critically, when such commander-intel team thinking sessions are precluded because of institutional lethargy or, in the words of the author, inability to perform seamlessly as an intelligence enterprise, commanders must speak up. In this age of competitive, mental warfare it is unacceptable for unit commanders to shrug their shoulders and willingly accept the institution’s inability to enable serious thinking about what was described earlier as the *micro* problems that must be identified and resolved routinely inside a unit.

The era of the institution developing and providing *macro*, one-size-fits-all solutions, tossing them over the transom to units, and puffing their collective chests out in the false belief that they have really helped a unit intel team deliver knowledge to the commander is over. It’s been over for decades. But without aggressive action to right this ship, knowledge firepower will continue to be largely a nonplayer in this fast-evolving competitive battlefield that features thinking more than things that go bang. Just as with the need for leadership to move forward in making an *intelligence enterprise* reality, so it is with the need to see a massive spurt of focused energy from the institution in establishing performance standards that settle for nothing less than excellence in thinking and the means to make it so. Just as with the enterprise the need for better thinking calls for a number of champions to step up, and simply say, “I got it!”



Finally, a few words about the author’s *Essay One: 1985—A Visit to Verdun—A Young Army Officer’s Impressions*. In this essay, General Hall deals with the connection, the relationship between the theory of war and its physical reality. [Moral Imperative, p.xx] This relationship permits him to talk directly to moral imperatives, the linkage between good—and too often bad or no—thinking and unnecessary, resultant soldier deaths. The basis for the essay was his 1985 visit to Verdun as a young officer. The author’s main point: neither French nor Germans generals seriously thought about what they were doing; in so doing, they contributed directly to the deaths of more than 300,000 soldiers between February and December 1916. In particular, the author concentrates on the need for “purpose” to drive war. He credited the six-month stalemate as resulting from one thing: a weak German lack of purpose. The German chief of the general staff, Erich von Falkenhayn, had one thing in mind: “bleed the French Army white.” What he did not take into account was that the French had a vote. He failed to account for French resolve. For the French, the “offensive was sacrosanct.” This led to their “egregiously poor thinking,” thinking that included “not being concerned about what the German strategic aims, goals, objectives ... could be...” Emphasizing that mindset, Hall quotes historian Alister Horne, saying: “From top to bottom, the [French] army was impregnated with ... extravagant, semi-mystical nonsense. ... *What the enemy intends to do is of no consequence.*”

Such lack of thought, evidenced by a lack of meaningful purpose on both sides, underpins General Hall's message throughout *The Moral Imperative of Our Time*. It is probably safe to say too that the author's experience, now almost 40 years ago, inspired his post-Army writing—writing concentrated on the need for improved thinking. The guts of the five essays in this book simply underscore why this need is so accentuated in the 21<sup>st</sup> century. And poor thinking, evidenced in weak, undefined purposes did not take a rest after WWI. Poor thinking was also prominent during the U.S. war in Vietnam.

In *Essay Five*, the author discusses American mental errors that stand out from its involvement in Vietnam. Under the leadership of the U.S. architect for the war, Secretary of Defense Robert McNamara, the author describes our “fatal fascination with numbers and disregard of the nature of the enemy's ‘will’ in North Vietnam.

*President Lyndon Johnson, his advisers, McNamara, Dean Rusk (Secretary of State), national security advisor McGeorge Bundy, the Joint Chiefs of Staff, and General William C. Westmoreland, Commanding General of all U.S. forces in Vietnam proved intellectually inept. ... [A]ll had in common the mistaken proclivity to think quantitative analysis would yield the right, rational conclusions, the right assumptions, the right actions....*

Referring to *Dereliction of Duty*, a book authored by retired Army general H.R. McMaster, Hall characterizes a dilemma faced by McNamara's “wonder boys.” While:

*all their numbers pointed to [U.S.] victory in Vietnam, ... they slowly concluded America was losing and did not know why. The reason for failure was their arrogance and ignorance about the definition, conceptualization, and employment of ‘will’ ....*

As mentioned earlier, the author's intent concentrated on educating and persuading. He has succeeded. This is a book for serious professionals, readers who bring a commitment to excellence to what they do. Reading this and his earlier books is not a walk in the park. It requires reading, thinking, re-reading, and serious contemplation about what it will take to pursue excellence—excellence whether you are an analyst, a collection expert, a unit commander, a strategist or policy-maker, or a member of one of the institutional organizations discussed in this review or highlighted in General Hall's work.

Serious effort will be needed to bring about changes the author proposes. It will take not just efforts to improve how people directly or tangentially involved in intelligence think. It will also take some breaking of china: 1) actions that seriously address the effectiveness of institutional support to intel professionals in units; and 2) related actions that assess the feasibility of existing organizations to support the proposed notion of a national to tactical intelligence enterprise. Changes such as these will not be straightforward actions. They will entail significant cultural change that embraces new ways to think inside long-standing institutional organizations.

As a consequence of the scope and nature of the implications to embracing the author's thinking, the most important requirement is for leadership that wants to win in the changed landscape of 21<sup>st</sup> century information- and technology-driven mental warfare. Champions are needed to effect such change, leaders who want to win and are willing to take unpopular stands to make it happen. This book is for those folks.

*John W. Smith is a retired U.S. Army Brigadier General. He is a long-time friend and former colleague of the author.*