



Janusian Thinking and Acting

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The authors maintain that the current U.S. approach to military operations—strategic, operational, and tactical—is too linear for today’s contemporary operating environment. They argue that future warfighters must move beyond linear thought and action to a realm of thinking and acting that recognizes and accepts paired yet opposite ideas and actions: “Look before you leap” and at the same time understand that “he who hesitates is lost.”

... for understanding proverbs and parables,
the sayings and riddles of the wise.

—Proverbs 1:6

THINGS DO NOT LINE UP like before. Traditionally, a nation-state attacks another with military force, and the response is rather predictable. Today, the qualities of nation-states are no longer required to initiate attacks; attacks may not even have traditional military qualities; and prediction is just not as calculable as before. Some military theorists have dubbed these new conditions “asymmetric warfare,” giving the impression that postmodern conflict is all about one-upmanship associated with hitting the enemy’s vulnerability with a different scale of means.¹ Some postulate that the problem of asymmetric conflict is at the strategic level. The underlying assumption of modern military thinking and acting is that we can address asymmetric problems with hierarchically directed linear thinking, as strategic, operational, and tactical levels of war represent. The argument is that the strategic, operational, and tactical paradigm exists because it enables the military to adapt through echelonment. The danger is that structure ends up driving response instead of needed capabilities and values driving organizational response. While the concept of

asymmetry has been presented often in professional literature, it remains ill-understood from the strategy::operations::tactics paradigm because this paradigm considers that we need better, not necessarily different, thinking and acting.

A Better Way of Thinking

What we really need is an alternative paradigm that gives us a new and better way of thinking and acting. The new approach should provide a range of insights that enable commanders to instantly conceptualize a pattern of multidimensional possibilities that lead to breakthrough concepts and values because the traditional strategic linear way of thinking and acting is inadequate, given the nature of the postmodern era. The preferred new paradigm must have several characteristics that set it apart from the strategic paradigm:

It must have a fractal quality that allows us to take simultaneous full-spectrum looks at human information processing, the sine qua non of thinking and acting.

It should not reject traditional levels of analysis such as strategy, operations, and tactics but should relegate them to secondary concepts.

It must emphasize concepts such as simultaneity of paradoxes (complex reasoning), compre-

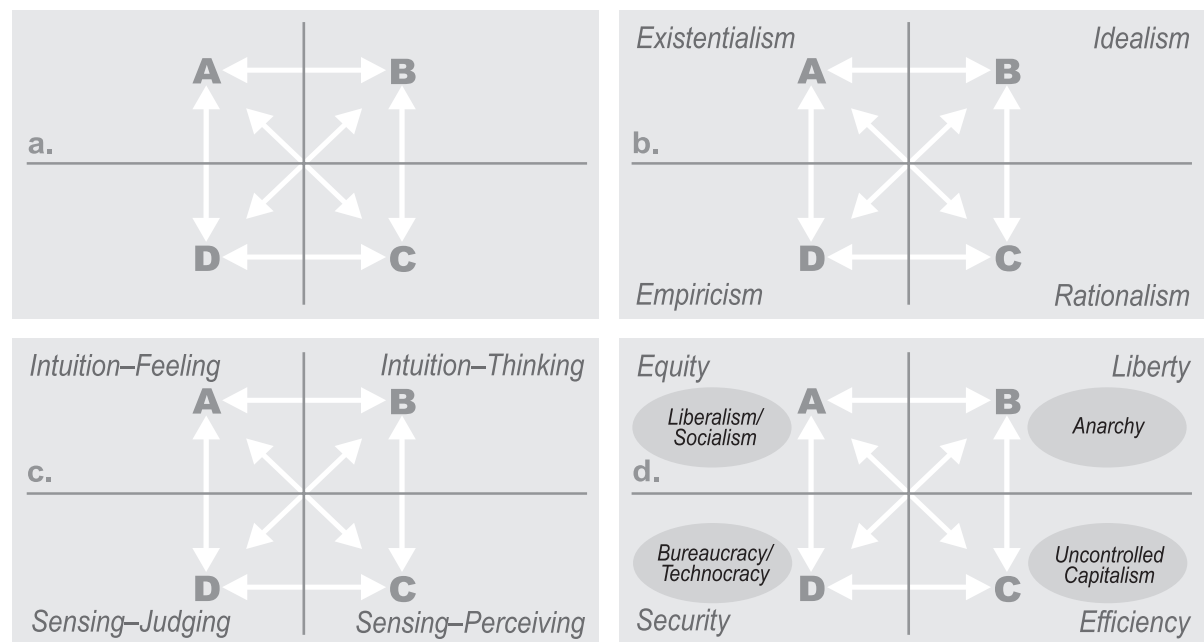
While the concept of asymmetry has been presented often in professional literature, it remains ill-understood from the strategy::operations::tactics paradigm because this paradigm considers that we need better, not necessarily different, thinking and acting. . . . What we really need is an alternative paradigm that gives us a new and better way of thinking and acting. . . . The preferred paradigm is Janusian.

hending activities in multiple time orientations (polychronicity), and embracing environmental complexity (unpredictability) as a normal condition.²

The preferred paradigm is Janusian, named after the Roman god Janus who looked four ways simultaneously.³ The Janusian paradigm cannot be explained as a logical result of the post-Cold War world because it is not really new. As the quote at the beginning of this article reveals, this wisdom has probably existed for thousands of years and requires reawakening.

Military leaders tend to look for doctrinal answers, but the solution this article proposes is not a prescription for what to do; rather, it is a description of how to think. Some may argue that increasing the speed of linear decisionmaking will address the chaotic nature of unfolding events, but that is not the case. The overarching issue of the post-modern predicament is fundamentally metaphysical:

how do humans process information? Linearly focused (schismogenic) thinking and acting—the methods of the current strategic paradigm—explains and rejects alternative hypotheses purposefully and sequentially.⁴ In other words, linear thinking and acting disallow the existence of contradiction. The proposed alternative Janusian thinking suggests that information processing is paradoxical, considers multiple time orientations, and is nonlinear. The Janusian theory of thinking and acting presents a dynamic and revealing interpretation of how people think and act—the way we actually think as humans involves continuous tolerance for paradox. Instead of ruling out alternative hypotheses, Janusian thinking calls on us to embrace contradictions as naturally occurring phenomena. When we create insights for thinking and acting from the Janusian framework, we achieve remarkable explanatory power over the nature of human information processing.



a. The basic Janusian four-square. The arrows represent the continuous, unrelenting struggle to balance paradoxical forces.
b. Metaphysical orientations. A. Existentialism—theory that knowledge is a human phenomenon; therefore, it cannot be described by science or idealism; B. Idealism—theory that knowledge comes from the mind or spirit; C. Rationalism—theory that knowledge comes from deductive reasoning; D. Empiricism—the theory that knowledge originates with experience.
c. Jungian psychology orientations. A. Intuition-feeling—positive, affirming idealists with warm, personable style; B. Intuition-thinking—planners and researchers; C. Sensing-perceiving—pragmatists who find practical solutions, especially during crises; D. Sensing-judging—administrators of bureaucratic systems requiring precision.
d. Political science orientations. A. Equity—redistribution of value; B. Liberty—autonomous freedom; C. Efficiency—most output for the input; D. Security—protection.

Figure 1. Janusian Orientations

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Janusian theory goes beyond rational thinking. Janusian theory makes it possible to make sense of the postmodern world in an almost circular, interconnected, interdependent way and, as a result, represents a more accurate understanding of the nature of complex human information processing.⁵

The authors' prototype of the Janusian framework is depicted in Figure 1. The basic Janusian model for thinking and acting is arranged in a four-square—A, B, C, and D—the arrows depicting struggles for dominance in one or more quadrants. It provides a complex, four-way, interdependent, interactive model for thinking and acting that goes beyond the traditional linear processing associated with strategy, operations, and tactics and helps us understand what we could not decipher or comprehend.

The Janusian framework provides the remarkable insight that the basic pattern of thinking and acting is fractal. In other words, conceptual patterns repeat endlessly, regardless of the field of study or social science we are interested in. This fractal quality is remarkable because it provides symmetry of scale that is self-similar, meaning one can zoom in on any part of the patterns repeatedly, and the patterns would still look the same. Even old proverbs take on new meaning: one can “look before you leap” and at the same time understand that “he who hesitates is lost.” Janusian theory suggests both principles can be followed simultaneously.

Janusian theory proposes that, to some degree, people as individuals or as groups can process contradictory information collectively in all quadrants simultaneously. With the A-B-C-D four-square framework, we can trace patterns from the highest level of processing—

spiritual meaning—to the individual psyche. Janusian theory reveals in time and space the paradoxical ways that humans process information—from the macro- explanations of mankind's spiritual being and self-awareness down through micro-explanations associated with entire societies, governments, institutions, organizations, and individuals. Remarkably, most approaches to studying many intellectual disciplines, such as metaphysics, philosophy, sociology, anthropology, economics, psychology, and political science, follow the same Janusian pattern.

For example, Figure 1 shows what happens in the political science four-square if we go too little or too far in any one direction. We may end up with pure socialism, with public apathy and chaotic governance; anarchism, with public belligerence and chaotic governance; uncontrolled capitalism, with public hostility and rigid, one-sided governance; or narcissistic bureaucracy, with the rigid means of government justifying the indifferent ends. This typology also describes the aesthetic beauty of the roughly corresponding American system of checks and balances on power: a two-party system with strong states' rights; a malleable representative Congress; strong judicial law and order; and the executive branch hierarchy.

Understanding 11 September

Recent terrorist attacks on the United States moved the domestic policy pattern sharply from the A::B horizontal axis of the Janusian four-square model—the domination of equity and liberty values—to the C::D axis, with the growing trade-offs with efficiency and security. This pattern repeats itself from the federal level to the local level of govern-



Figure 2. Emery-Trist Environmental Conditions Depicted on the Janusian Four-Square

The New York fire and police departments responded to the World Trade Center disaster armed with their honed skills and rehearsed actions and swift trust in each other. To many observers, this response is seemingly a throwback to a pre-nation-state way of thinking and acting.

Photo not available

ment and reflects a merging of foreign and domestic policy patterns in the United States, a merger that is distinctly Janusian. For example, Janusian thinking and acting tells us that it is important in the current conflict that we understand that in defending the values that are being attacked, we do not destroy them in the name of fighting the enemy.

Postmodern Conflict and the Military

In 1965, Fred E. Emery and Eric L. Trist produced a seminal work describing “the causal texture of organizational environments.”⁶ These descriptions are based on the degree of turbulence (placid, disturbed, and turbulent) and on the degree of interconnectedness present in the organization (random, clustered, reactive, and mutual). They organized these conditions into four environmental conditions as shown in Figure 2: placid-clustered, turbulent-mutual, disturbed-reactive, and placid-random.⁷ Emery and Trist suggest there are corresponding coping mechanisms for each texture of the environment. The Janusian four-square model applies to studying postmodern conflict. It offers substantial insight into the war on terrorism. The authors propose that these conditions correspond to four

types of conflict that also yield distinctive coping mechanisms. The Janusian paradigm corresponds remarkably well with Emery and Trist’s model.

It is important to Janusian thinking and acting to remember that the four environments depicted in Figure 2 have always existed simultaneously. Strategy, operations, and tactics are relevant only in addressing type C conflict in its ideal form. Type C conflict does not occur in isolation from the other types of conflict but in combination with them; hence, the strategic::operational::tactical thinking and acting are insufficient. Relying on strategy, operations, and tactics as patterned responses to conflict alone produces structural inertia. Unfortunately, the administrative/institutional/departmental Army and not the field Army is often the source of undesirable structural inertia.

The structural inertia that afflicts large organizations impedes their learning from small and dispersed operations. The Vietnam war and Operation Desert Storm were large-scale, shared experiences. In contrast, El Salvador, Panama, Haiti, Somalia, Bosnia, and Kosovo are dispersed and diverse experiences. Large-scale administrative structures like the U.S. Army Training and Doctrine Command

Relatively autonomous and covert special forces teams or individuals sometimes make assessments and act without anything more than the strongly held values of their profession and country. U.S. Army Rangers displayed this idealistic thinking and acting when rescuing their fellow soldiers in Somalia in 1993.

(TRADOC) cannot translate such experiences into force structure very well. When TRADOC tries to synthesize lessons learned, it tends to miss the essence and differences of each operation; hence, the value of change is diluted. Postmodern conflict should not only be examined through the constrained lens of strategic direction, campaigns, and tactics but also on a larger pattern of information processing—a Janusian way of thinking and acting.

To embrace the Janusian paradigm, we must transcend old ways of thinking and acting. For the military, a transformation in thinking and acting must accompany the Army's effort to transform its current organizational structure and equipment. In other words, military leaders must understand the fractal aspects of examining the approach to thinking about how and why permanent organizations are structured as well as understand how to apply fractal notions to task-organized echelons. The flexibility we achieve through task organizing must become

common within the units themselves. Units must become more self-organizing. Figure 3 depicts Janusian decisionmaking and describes how decisions are made within each type of conflict. In reality, these four ideal types do not occur in isolation. The Janusian framework permits all four to occur simultaneously.

Low-intensity, high-uncertainty conflict (LIHUC) (type A conflict). Tactics are insufficient, and strategy becomes important because survival becomes the dominant motivator. Strategy's purpose is to find the optimal location of safety in the environment.

High-intensity, high-uncertainty conflict (HIHUC) (type B conflict). The turbulent field and the effects of unpredictable mutual causality shown in quadrant B are the dominant conflict types we are faced with today. In turbulent fields, boundary protection (strategy), linked tactics (operations), and order (tactics) no longer suffice. Events are so mutually causal that there is no longer a distinction between what was once considered tactical and that

Conflict Type	LIHUC (Type A)	HIHUC (Type B)	HILUC (Type C)	LILUC (Type D)
Analogy	Monroe Doctrine (1840s) New Frontier (1960s)	Asymmetric Warfare	World War II Desert Storm	Cold War (1950s)
Military Instruments	Coast Guard Special Forces	Naval Forces Semiautonomous SOF-Style Teams	Conventional Forces	"Missileer" Air Force "Boomer" Navy "Administratively Readied" Army
Planning Style	Commitment Planning Real-Time Response Discretion bounded by broad policy	Orientation Planning Discretion bounded by trust and a common appreciation	Contingency Planning Discretion bounded by law of war, geography, and policy end states	Standing Operating Procedure Discretion bounded by response plans and readiness standards
Method	Strategy and Tactics	Transcendental Value Systems	Operations, Tactics, and Strategy	Tactics (Tactics are Strategic)
Command & Control	Dispersed Guided by Strategy	Dispersed	Centralized and Delegated	Centralized Hierarchical
Federal Organizational Response	Federal Emergency Management Agency Embassy Country Teams	Homeland Security Office? Revised Unified Command Plan?	Warfighting CINCs	NORAD US Strategic Command

This figure describes how decisions are made within each type of conflict. In reality, these four ideal types of conflict do not occur apart from one another. The Janusian framework permits all four to occur simultaneously in remarkable patterns. The authors maintain that HIHUC [type B] dominates the pattern of the present war on terrorism.

1. These planning styles are roughly based in one author's earlier work. See Colonel Christopher R. Paparone, "US Army Decisionmaking: Past, Present and Future," *Military Review* (July-August 2001), 45-53.

2. For an explanation of trust, see Christopher R. Paparone, "The Nature of Trust In and Between Organizations: What the U.S. Army Professional Needs to Know," unpublished.

Figure 3. Comparison Chart for Janusian Conflict Types

The basic Janusian model for thinking and acting is arranged in a four-square—A, B, C, and D—the arrows depicting the struggles for dominance in one or more quadrants. It provides a complex, four-way, interdependent, interactive model for thinking and acting that goes beyond the traditional linear processing associated with strategy, operations, and tactics and helps us understand what we could not decipher or comprehend.

which has strategic significance. Today, the United States is deeply enmeshed in global and regional activities. Consequences that flow from activities in such an environment are highly uncertain and interconnected so that exclusively relying on the hierarchy of strategy, operations, and tactics becomes problematic because of the need to adjust rapidly to change.

High-intensity, low-uncertainty conflict (HILUC) (type C conflict). Coping requires an operational level of response because tactics and strategy are no longer sufficient. We see others emerge and occupy a similar status in our environmental domain. This type of environment dominated world conflict in the 20th century.

Low-intensity, low-uncertainty conflict (LILUC) (type D conflict). Here, “there is no distinction between tactics and strategy,” and the optimal strategy is just the simple tactic of attempting to do one’s best to react in real time.⁸

At best, only partial stability of the environment can be achieved because strategic, operational, and tactical processes neither influence events rapidly enough nor are they flexible enough for the random nature of type B conflict. In B::D patterns of conflict, stability can only be achieved through shared values because strategy, operations, and tactics cannot direct obligatory responses rapidly enough. Responses must come from a diffuse and flexible capability, which is the result of dispersed thinking and acting, based on appreciating the emerging situation and executing decisions based on a common set of values as well as habitual or professional action such as well-rehearsed standing operating procedures.

For example, relatively autonomous and covert special forces teams or individuals sometimes make assessments and act without anything more than the strongly held values of their profession and country. U.S. Army Rangers displayed this idealistic thinking and acting when rescuing their fellow soldiers in Somalia in 1993.⁹ Strategy, operations, and tactics were so compressed that they were relegated to secondary criteria for decisionmaking. In this situation, Rangers displayed an on-the-ground example of nonhierarchical thinking and acting that went beyond strategy, operations, and tactics. Vietnam, on the other hand, provided numerous instances of what happens when strongly held but unacceptable

values lead soldiers to act dishonorably. The actions at My Lai occurred during operations that had little to do with strategy or tactics.¹⁰ The leader’s challenge becomes how to shape an appropriate value system that leads soldiers to do the right thing. A list of formal organizational values—something that the Army has recently developed and disseminated—is arguably insufficient.¹¹

Shared values stir otherwise self-interested actors into collective thinking and acting. The intuitive “reasonable man” view of humankind assumes dominance over the value-maximizing “rational man” concept. These autonomous social forces outweigh formal rules and structure, and free us to think in new configurations—Janusian patterns. In postmodern military vernacular, Janusian patterns are portrayed as asymmetric warfare.

Military leaders and followers must embrace a quadrant B spiritual perspective with the Janusian paradigm, although this spiritual perspective seems counterintuitive. Leaders can no longer rely on the dominant framework of processing information predominantly through the metaphysical interpretations of existentialism and rationality. Instead, leaders use the coping mechanism of shared values and specific routine actions to understand surprise or the enemy’s intent.

The difference we must perceive in our present condition is that, in light of the human processing the type B pattern of conflict requires, idealism must dominate Janusian thinking and acting. In the current conflict, we must understand not only where the enemy is located physically but also where he is morally—what drove him to accept a certain set of moral values that put him there in the first place. Osama bin Laden did not have to invest in expensive Tomahawk missiles; instead, he invested in fanatical Islamic religious fervor.

In the B::D pattern of conflict, we must provide at least secondary, but not necessarily less important, emphasis on the reactive coping mechanism of doing the best we can. The tendency is to act according to prescribed protocols. For example, the New York fire and police departments responded to the World Trade Center disaster armed with their honed skills and rehearsed actions and swift trust in each other. To many observers, this response is seemingly a throwback to a pre-nation-state way of

New forms of organizing, such as the highly flexible network organizations, require a new power structure, something that the military culture may find inconceivable: rank and hierarchical positional authority would have to give way to expert power and lateral forms of leadership.

thinking and acting. Nevertheless, that dimension of the Janusian paradigm now takes an important secondary role in the B::D pattern of conflict. The rational and existential roles—the A::C pattern of conflict—are diminished to tertiary ways of processing information. In other words, the B::D pattern requires the simultaneous, instinctive actions of the highly trained tribal warrior and the cleverness of the 21st-century soldier-entrepreneur.

In short, the Janusian framework requires formulating new and complex recipes for thinking and acting in multiple patterns rather than embracing a singular one. Instead of using a linear thinking model to decide between competing values, the trick is to find a positive zone among them by using a nonlinear thinking model. All patterns in various mixtures are important to give relevance to the simultaneity of opposites, multiple time orientations, complex spatial relationships, and degrees of interconnected cause and effect.

Equally important in Janusian theory is understanding the patterns of the past, present, and future, appreciating multiple activities with multiple temporal orientations such as present to future, past to present, and present to past. It requires embracing, at the same time, all four environmental and con-

flict types that have occurred, are occurring, or will occur. Janusian thinking is not only about framing human information processing paradoxically but also temporally. In short, understanding events occurring in space and time must always be considered in the context of patterned rather than linear relationships. It is this embrace of patterned thought that will distinguish those who can truly think and act beyond strategy and those who simply apply strategic notions to operations and tactical situations.

The art of war becomes the art of thinking in time and space, visualizing the Janusian four-square as dynamic spatial patterns moving through time. This may explain why, like an amnesiac, the United States has awakened in the middle of a war, only to find out it has been going on for years. This may also explain the spiritual clashes that soldiers feel as they transition from an operational environment back to the administrative Army—the value system associated with the different Janusian patterns has shifted dramatically.

Implications for Military Leaders

Thinking and acting in opposites; embracing a unity of opposites.¹² Karl E. Weick explains that “People try to fit novel interpretations and actions

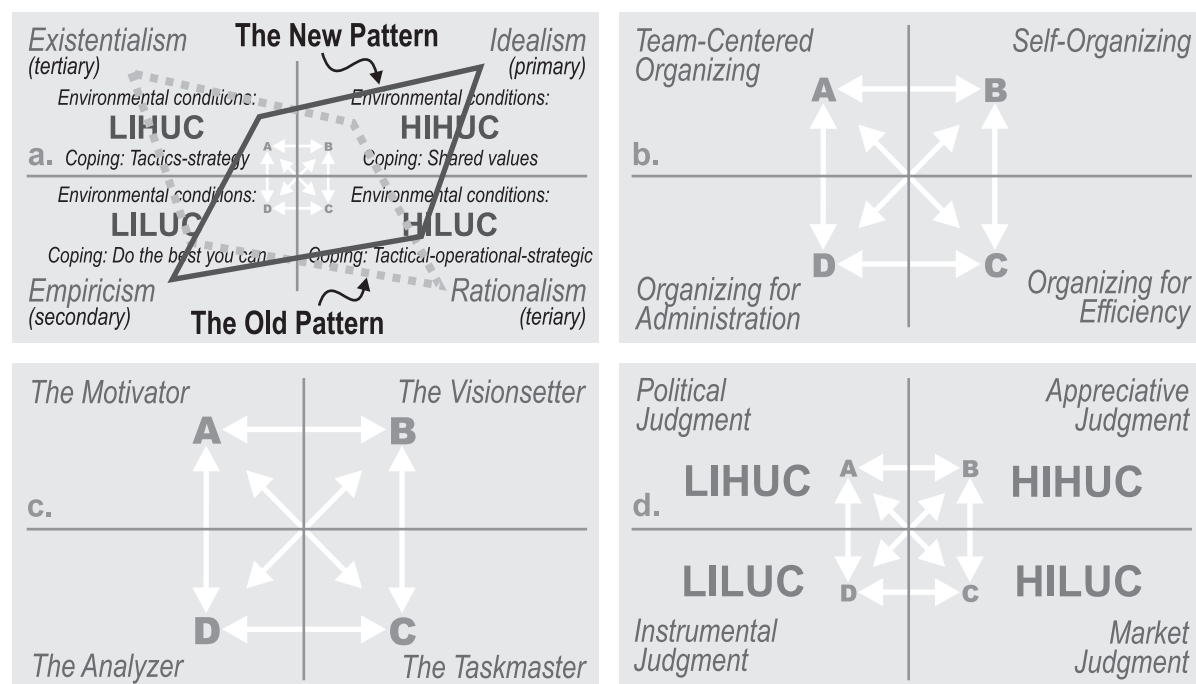


Figure 4.

In today's conflict, terrorists control the environment, a B quadrant activity, yet the United States has been responding bureaucratically, a type D response. Forming the Homeland Security Office, tightening airport and airplane security, and screening mail are all bureaucratic responses to the type B environment.

Photo not available

David Bohrer

into what they've known all along. And when something doesn't fit with the past, it's often discarded or misread."¹³ The emerging dominance of idealism in the postmodern era requires that our military leaders embrace new types of thinking and acting that affect postmodern living. These new types of thinking and acting exist simultaneously and with varying intensities and ambiguities as shown in Figure 4. When military leaders consciously adopt the Janusian paradigm as an intellectual framework, they add tremendous value and balance to their understanding of strategy, operation, and tactics. Military leaders must be able to link and integrate military, political, social, and psychological thought processes into a coherent approach to thinking about warfare and military operations in a complex world; otherwise, they might get locked into a linear mode of thought that not only limits their options but also leads them onto the wrong conflict path.

A greater emphasis on nonroutine, appreciative inquiry—appreciative intelligence that considers multiple and different patterned sense-making across multiple time orientations. How we work will also be affected, requiring multiple and simultaneous responses. In a B::D pattern of con-

flict, how we work will require an expanded reverence for philosophical interests such as clashes of the spiritual sensing of reality or value-to-value relationships. Weick further explains that "[Leadership] problems persist because [leaders] continue to believe that there are such things as unilateral causation, independent and dependent variables, origins, and terminations. . . . Those assertions are wrong because each of them demonstrably also operates in the opposite direction: productivity affects leadership style, children socialize parents, responses affect stimuli, means affect ends, actions affect desires. In every one of these examples, causation is circular, not linear."¹⁴ Leaders must look at today's conflict in terms of global sensemaking and realize adversaries use values to motivate a different kind of soldier and to shape the battlefield.

In today's conflict, terrorists control the environment, a B quadrant activity, yet the United States has been responding bureaucratically, a type D response. Forming the Homeland Security Office, tightening airport and airplane security, and screening mail are all bureaucratic responses to the type B environment. To be successful in this war, the United States must create an environment that is

The Janusian framework requires formulating new and complex recipes for thinking and acting in multiple patterns rather than embracing a singular one. Instead of using a linear thinking model to decide between competing values, the trick is to find a positive zone among them by using a nonlinear thinking model.

more turbulent and uncertain for the terrorist than the one they create for us. The United States must seize the initiative in the B quadrant while sustaining the others. It must embrace dispersed, decentralized control and self-designing or self-managing capabilities that current systems do not promote or even allow to the needed degree. Many commanders want to develop practical doctrinal prescriptions because they embrace the rational actor model. They should move away from such absolute linear thinking. The United States cannot afford to play a linear, tactical game of localized checkers while its adversaries play a patterned, global game of three-dimensional chess—one that uses a variety of moves employing different capabilities that can be sacrificed as long as the objective is achieved.

Developing hyperadaptive organization structures that emphasize teams that can anticipate and respond under HIHUC conditions.

Nonroutine, appreciative inquiry shapes the need to self-organize nontraditional intelligent organizations that consider multiple and different patterned meanings. Organizing requires emphasis on building teams, not monolithic, hierarchical units. In practical terms, this means organizing the military as an integral part of larger government capabilities based on multiple continua of adaptations needed for infinite configurations of conflict. There is a big difference between fighting a conflict by using current organizational capabilities and fighting a conflict by organizing around required capabilities. For example, in a future cold war with China, are we driven to forward deploy forces because forward-deployed forces are the capability we have, or do we adapt military, information, and economic capabilities to disrupt China's self-governance fundamentally so that putting troops on the ground is not the only solution available? In other words, while the military may be comfortable using traditional definitions of chaotic and complex situations, the real issue is whether the military will end up fighting with an erroneous conception of the pattern of conflict they are really in—they are fighting the wrong war.

The politico-hierarchical structure, or "polyarchy," of our current politico-military system is inadequate for type B conflict.¹⁵ New forms of organizing, such as the highly flexible network organizations, require a new power structure, something that the military culture may find inconceiv-

able: rank and hierarchical positional authority would have to give way to expert power and lateral forms of leadership. Instead of addressing levels of leadership—clearly a linear way of responding—the military must address patterned archetypes of the environment that require leadership effectiveness. Traditional top-down leadership can no longer be the only consideration for military management. Rather, the emerging pattern of conflict is best met with nontraditional, ad hoc, flexible ways of organizing—with members who are continuously self-designing capabilities based on their unyielding shared values and mutual understanding of what is happening in the environment.

We see this being played out politically while a coalition of multicultural nation-states and beliefs is being mobilized. This kind of adaptive organizing encourages innovative social and technical designs that are nonhierarchical and nonrational—in a phrase, ad hoc. Hierarchically, flatter organizations call for diffuse and laterally oriented organizational effectiveness. Perhaps the special operations forces models become more attractive. Thinking and acting without orders must be acknowledged as sometimes appropriate in a government and with our citizenry. Field Marshal William Slim came to the same conclusion when he wrote of his leadership complexity during World War II: "The acting without orders, in anticipation of orders, or without waiting for approval, yet always within the overall [values], must become second nature in any form or warfare where formations do not fight closely *en cadre*, and must go down to the smallest units. It requires in the higher command a corresponding flexibility of mind, confidence in its subordinates, and the power to make its [values] clear right through the force."¹⁶

Developing laterally oriented Janusian leaders.

Today's environment will require developing and training confident, self-aware Janusian military and political leaders who are comfortable with lateral contribution regardless of the contributor's rank or position. The Janusian paradigm requires a fundamental shift from the hierarchical "strategic, organizational, and direct leadership" espoused by current Army doctrine.¹⁷ The new leadership paradigm is all about role complexity. Those who sense and feel shifting organization and environmental patterns and adapt accordingly lead the most effective organizations. Janusian leadership transcends the need for hierarchical leadership because Janusian lead-

ers focus on serving and developing high-performance teams. The short names for these simultaneous roles are shown in Figure 4: the motivator, leading commitment; the vision-setter, leading into an uncertain future; the taskmaster, leading against identifiable challenges; and the analyzer, leading compliance.¹⁸

Embracing the notion that values associated with quadrant B and the values of habit associated with quadrant D must become a key source of thinking and acting and not just historic tactical-operational-strategic linear ways of thinking. Military leaders should not throw away their learning and styles associated with quadrants A and C—they are still important and must exist simultaneously. However, our military theories and institutionalized thinking processes are still dominated by a paradigm of linear thinking; hence, the questions of strategy, operations, and tactics still dominate our models for reasoning and responding. Unfortunately, our mili-

tary teaching and training institutions are reluctant to make the intellectual pedagogical leap to include a more nonlinear, flexible way of theorizing and taking action—the Janusian approach to processing information.

We must embrace paradox, polychronicity, and unpredictability through a new but ancient paradigm. We must work together while working apart. We must individually interpret the environment while maintaining others' visions of it. We must compete while cooperating. We must obey orders, rules, and doctrine while simultaneously thinking and acting to defy them. We must know ourselves inwardly while understanding ourselves from the outside. We must decide by not deciding. We must trust while distrusting. We must lead by following. These new riddles and new wisdom are just some examples of Janusian thinking and acting that the military must adopt if it is to effectively transform itself into a 21st-century force. **MR**

NOTES

1. See the July-August 2001 edition of *Military Review*.
2. The authors use the following definition of paradox: "contradictory yet interrelated elements . . . that seem logical in isolation but absurd and irrational when appearing simultaneously." See Marianne W. Lewis, "Exploring Paradox: Toward a More Comprehensive Guide," *Academy of Management Review*, Vol. 25, No. 4, 760-76.
3. The Latin term "quadrifrons" means "four faces." The word "January" (the gateway between the old year and the new) is based on Janus and the Roman calendar. See Louise A. Holland, *Janus and the Bridge* (Rome: American Academy, 1961), 3. [Janus is] "the bright sky, he is the special aspect of the sun at the beginning of his half-yearly cycle; he is chaos, he is time, he is the father of time itself and the creator of all things; he is the spirit of the house door, and hence the guardian of the city gates and of the boundaries and the transitions; he represents a 'rite de passage' . . . [he is] a complex enigma. . . . The four faces [that Janus] sometimes wore were hardly enough for a god who looked so many ways." The Janusian paradigm takes us away from the rational, cause-effect paradigm associated with 20th-century scientific reasoning.
4. Much of the discussion in this article on Janusian thinking and acting is based on the "competing values framework" borrowed from organizational theory. For a detailed explanation of transcendental thinking and its importance in organizational transformation, see Robert E. Quinn and Michael R. McGrath, "The Transformation of Organizational Cultures: A Competing Values Perspective," P.J. Frost, L.F. Moore, M.L. Louis, C.C. Lundberg, and J. Martin, eds., *Organizational Culture* (Beverly Hills, CA: Sage, 1985), 315-34.
5. For a psychoanalytic view of Janusian thinking, see Albert Rothenberg, *The Emerging Goddess: The Creative Process in Art, Science and Other Fields* (Chicago, IL: University of Chicago, 1979), 55, 66, and 69. Rothenberg's definition of Janusian thinking is: "conceiving two or more opposite or antithetical ideas, images or concepts simultaneously." It is highly related to his concept of homospacial thinking—associated with transformational thinking—that "consists of actively conceiving two or more discrete entities occupying the same space, a conception leading to the articulation of new identities."
6. Fred E. Emery and Eric L. Trist, "The Causal Texture of Organizational Environments," in Fred E. Emery, ed., *Systems Thinking* (Middlesex, England: Penguin, 1965), 241-57.
7. These are not in order of complexity but in order of the A-B-C-D four-square discussed at the beginning of this article. D-A-C-B would be the order in terms of environmental complexity.
8. Emery and Trist, 246.

9. See the account in Mark Bowden, *Black Hawk Down: A Story of Modern Warfare* (New York: Atlantic Monthly Press, 1999).
10. Tim Larimer, "Echoes of My Lai," *Time* (Asia Edition), (16 March 1998) accessed on 26 October 2001 at <<http://www.time.com/time/magazine/1998/int/980316/vietnam.html>>.
11. For example, see one of the author's previous commentaries on Army Values in Christopher R. Paparone, "Soldiers: The First Level of War," *Army Logistician* (March-April 2001), 43.
12. Ludwig von Bertalanffy, *General System Theory: Foundations, Development, and Applications* (2d Ed.), (New York: George Braziller, 1969), 248. Bertalanffy states: "Hence, ultimate reality is a unity of opposites; any statement holds from a certain viewpoint only, has only relative validity, and must be supplemented by antithetical statements from opposite points of view."
13. Karl E. Weick, *The Social Psychology of Organizing* (New York: McGraw-Hill, 1979), 376.
14. *Ibid.*, 86.
15. For example, see Robert A. Dahl, *Polyarchy: Participation & Opposition* (New Haven, CT: Yale University, 1971, 7). Interestingly, Dahl used a similar four-square typology in describing his continua of governments. We would classify them as A. inclusive hegemonies, B. polyarchies, C. competitive hegemonies, and D. closed hegemonies.
16. Field Marshal Viscount Slim, *Defeat Into Victory: Battling Japan in Burma and India, 1942-1945* (New York, NY: David Company, 1961), 451.
17. Department of the Army Field Manual 22-100, *Army Leadership: Be, Know, Do* (Washington, DC: U.S. Government Printing Office, 1999); and Roderick R. Magee ed., *Strategic Leadership Primer* (Carlisle, PA: U.S. Army War College, 1998). The actual Army product is a pyramidal view of leadership; literally, just look at the graphic of the model. The roots of the model are based squarely on the stratified systems theory (SST). From SST came the Army leadership model, built upon hierarchy. In other words, the model assumes we have rank, position, and levels of organization that look like the Army of today. In SST, indirect (strategic) leaders occupy vantage points near the boundaries of the upper organizational hierarchy. For more explanation, see T.O. Jacobs and E. Jacques, "Military Executive Leadership," in K.E. Clark and M.B. Clark, eds., *Measures of Leadership* (West Orange, NJ: Leadership Library of America, 1990).
18. For an example of a behavioral complexity model of leadership, see Stuart L. Hart and Robert E. Quinn, "Roles Executives Play: CEOs, Behavioral Complexity, and Firm Performance," *Human Relations* (Vol. 46, No. 5, 1993), 543-74.

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