The United States military is reviewing command and control (C2) as part of a larger transformation process underway in the Department of Defense. A key question for future C2 design is: who should make decisions for forces engaged in war?

Net-centric theory questions the current concentration of decision-making authority in the hands of operational level leaders—traditional generalship. Theorists of Information Age warfare contend that decision-making power should increasingly shift from operational to tactical level commanders to fully realize the potential of net-centric organization.

Classic theory on war, modern decision sciences, and case studies of recent net-centric environments suggest a different conclusion. Operational level commanders continue to provide a unique “value added” to decisions in war. This value is a product of intuitive grasp—Clausewitz’s “genius for war”—and the wisdom derived from experience and education. Drawing on this intuition and experience, operational commanders are better able to perceive and act on campaign-level opportunities or dangers missed at the tactical level.

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INTRODUCTION

The art of generalship has a long pedigree in the classic literature of war\(^1\). In *The Peloponnesian War*, Thucydides casts Themistocles as an ideal general: “through force of genius and by rapidity of action this man was supreme at doing precisely the right thing at precisely the right moment.”\(^2\) Similarly, the Book of Joshua portrays its subject as a canny and inspirational hero whose successful indirect campaigns win the Promised Land for the Israelites.

Clausewitz takes up the question of generalship\(^3\) early in his first book of *On War*. In discussing the “genius for war,” he focuses on the psychological aspects of decision making. He holds that the higher level of war demands the most intellectually of a commander, and is the area in which genius is a critical element, since decisions at this level can determine the “honor and safety” of entire nations.\(^4\)

The stakes of generalship remain high today. Generals who make the right command decisions and lead their nations to victory are immortalized in history (and war college texts). Those who get the big decisions wrong are vilified, retired early, or occasionally executed. Whatever their fate, individual generals have traditionally served as the focal points for studying military decisions in war.\(^5\)

Contemporary writings on information-age warfare raise new questions about the role and significance of generalship. Some theorists contend that a net-centric battlespace characterized by high tempo, non-linear, and simultaneous actions offers little prospect for generalship as traditionally practiced. Specifically, many envision a good portion of the decision making now at the operational level shifting to the tactical level in net-centric warfare.\(^6\)

One of the first questions raised by net-centric theory is whether there will be any operational decisions left to be made? If the Revolution in Military Affairs (RMA) compresses and
marginalizes the operational level of war\textsuperscript{7}, can operational level decisions still be relevant?

If one concludes operational level decisions remain to be made, a second question arises: are generals the right people to make them? A force defined by a less hierarchical command structure, empowerment of professionals at the lowest possible level, decentralized decision making, and self-synchronization appears to offer little scope for generalship. Does a netted force make most generals irrelevant?\textsuperscript{8}

This paper proposes to answer these questions by arguing for the continuing vital importance of generalship in net-centric warfare. It begins by reviewing classic and current theories of war to evaluate the relevance of the operational level and closes with a short list of decisions that remain the province of that level.

The second part takes up the issue of generalship, beginning with Clausewitz’s definition of military genius and comparing it with more current findings of modern decision theory. Contemporary writings on command in war add two other fundamental characteristics to Clausewitz’s core concept of genius as intuitive grasp: collaborative dialogue and occasional micromanagement. This section draws on the wisdom of past masters of operational art—Field Marshals von Manstein and Slim—and applies their insights to a brief survey of operational decision making in contemporary net-centric environments: the Kosovo Campaign, Exercise Millenium Challenge 02, and Operation Iraqi Freedom.

THEORIES OF WAR AND OPERATIONAL ART

Clausewitz defines war in psychological terms—the clash of wills of opposing commanders.\textsuperscript{9} He adds that the best commanders in war set out to impose their will on an enemy force rather than react to the designs of their adversaries. He notes that commanders at the highest echelon of decision making differ from tactical commanders in their wisdom and ability to grasp
the larger significance of decisions in battle.10 In this formulation, the commander has the lead, through campaign design and command decisions, in dealing with the uncertainty and chance that make up one of the three defining characteristics of war.11 In sum, Clausewitz reserves the most important role in handling uncertainty in war for senior commanders—those above the tactical.12

Edward Luttwak, writing in 1987, echoes Clausewitz in describing the operational level as the clash of “directing minds.”13 Luttwak asserts that only at the operational level are commanders deciding among styles of warfare, rather than making tactical choices of weaponry and procedures. He describes this choice of style as taking place on a continuum between attrition and maneuver. “Relational maneuver” is the operational style seeking to unhinge enemy decision making rather than physically destroy his forces. In this Luttwak sounds a common note with net-centric theorists discussing effects-based warfare and decision superiority.14 At the same time, he explicitly defends the operational level as a critical lens through which commanders improve their ability to choose the best warfare style to fit given conditions of time, space and force.15

Milan Vego centers on the objectives of a nation in war in conceiving it at the tactical, operational and strategic levels.16 In this view, the operational level is a powerful tool to define objectives, assign responsibilities, and trace paths to objectives. Vego adds that war visualized at the operational level also helps commanders grasp when a force or campaign has reached its culminating point—or pushed an adversary to theirs. This helps a commander know when to make critical operational decisions such as committing reserves or shifting from defense to offense.

Without war conceived at separate levels, commanders increase their risks of missing or mistiming critical decisions that exploit opportunities or forestall dangers.17

Joint doctrine also affirms the primacy of the objective in defining warfare at the three levels. Joint Pub 3-0 states that the operational level is distinct in its action “in a broader dimension
of time and space” compared to the tactical, and in its ability to integrate and exploit tactical success to achieve strategic objectives. Army doctrine also specifies a single commander must unify actions at the operational level.

Theorists of the Revolution in Military Affairs (RMA) tend to describe the emergence of the operational level of war as a conceptual breakthrough valuable in its time, but now superceded. In this view, the division of war into levels provided a means for commanders to deal with limitations and asymmetries in various military technologies. Increasingly mobile and dispersed forces required an intermediate level of command and control to overcome the limits in communications and span of control of a single supreme commander or general staff. While the operational level made a virtue of the necessity of dealing with technological shortfalls, new technology bridges gaps that made the operational level originally useful. Accordingly, new concepts of organizing will replace the operational level.

Many net-centric theorists see this new model as one of “swarming” of dispersed tactical units constantly maneuvering to exploit physical and information seams of more rigid and linear foes. They tend to view this model of war as another blow to the relevance of an operational level traditionally defined by deliberate phased maneuvers of larger formations--corps, armies, battle fleets, and air forces. A student at the Naval War College echoes this view that technology marginalizes the operational level and therefore makes operational art much less valuable as a conceptual method for campaign design and execution.

The jury is still out on the ultimate fate of the operational level. Current U.S. joint and service doctrines rely on the operational level as the primary means to plan and fight campaigns and major operations. It is a core competency taught in U.S. war colleges and military command and staff training establishments.
The recently released Department of Defense Transformation Guidance suggests that, in the future, the operational level will be deemphasized in favor of self-synchronized actions by units at the tactical level. Admiral Giambastiani, Commander, Joint Forces Command also foresees a shift of doctrinal weight to the tactical level, based on future adversaries’ responses to U.S. military superiority: “Large force-on-force groupings are not ... the wave of the future.”

The net-centric paradigm of warfare has not yet offered a compelling alternative to the operational level and operational art as the best means to consciously and willfully link tactical actions to strategic objectives. Vego’s assertion that the operational level is valuable because it helps commanders focus explicitly on objectives and integration rather than tactics remains persuasive. Clausewitz’s views on military conflict as essentially a contest of opposing commanders’ individual wills, and the current doctrinal principle that operational commanders exert this will consciously through campaign design and execution also appear to have lasting value.

As for the kinds of decisions that remain at the operational level, Vego furnishes a reasonable list:

- Determining/changing objectives
- Determining/shifting foci and points of main effort
- Balancing concentration, maneuver, and use of tactical and operational fires in directing forces executing the campaign plan
- Changing the sequence, synchronization, and phasing of forces in the campaign
- Committing reserves
- Shifting to/from offense and defense
- Changing, altering, and rescinding decisions made by tactical commanders
This paper next addresses whether operational decisions should remain in the hands of generals. In one sense the proposition is a tautology—by definition operational decisions must be made by operational decision makers. Still, net-centric theory questions whether this is so.

Clausewitz identifies the distinctive characteristics of the ideal senior commander early in the first book of On War. He defines one of them as “coup d’oeil: the rapid discovery of a truth which to the ordinary mind is either not visible at all, or only becomes so only after long examination and reflection.” The commander applies this talent in war:

- To recognize dangers and opportunities based on information not within physical sight, and
- To rapidly and correctly decide on a course of action to exploit those opportunities or counter those dangers.

Many writers since Clausewitz have used the artist or novelist as an appropriate metaphor to communicate the idea of “coup d’oeil” in action. As artists or novelists, generals grasp the core meaning and convey the larger themes of a campaign amidst a bewildering array of details. Artistry and “feel”, however, are not concepts that sit comfortably with a military culture valuing precision and definition. Operational genius is hard to quantify, hard to prove, hard to replicate.

In an effort to make the study of operational decision making more scientific, researchers in the decade after World War II applied the rigor of operations analysis to the documentary record of key operational and strategic decisions made during the war. In an ambitious and popular study initially published in 1959, U.S. Army historians analyzed more than 20 significant decisions from WWII. The introductory essay in Command Decisions defined them as made up of five components:
--Desired/assigned objective

--Calculation of risk

--Exercise of Authority

--Assumption of Personal Responsibility

--Decisive influence on events shaped by the decision.

This framework proved traditional in its concentration on the individual decision maker, but editor Kent Roberts Greenfield cautioned the tremendous growth in staff officers and advisors surrounding a senior decision maker altered the nature of command decisions. He specifically noted that staffs tended to narrow the information and options presented to commanders. Greenfield chose Clausewitzian language to describe leaders’ “besetting problem” in this environment:

“To keep alive…intuitive insight, which leaders of the past could nourish on first-hand knowledge and experience.”30

Graham Ellison followed a similar path in setting out conceptual models of decision making based on study of the Cuban Missile Crisis. Essence of Decision is considered a classic for the enduring analytic value of its three models of decision making in crisis. Ellison’s findings on the influence of collective/group dynamics on a decision makers’ perspective are most relevant to this paper’s focus on the art of generalship.

Ellison found that decision makers added additional “players” to the process to filter out individual biases and improve analysis and synthesis of information.31 He cautioned however, that only a small numbers of players typically produced this gain. Increasing the number of consultants eventually degraded the quality and timeliness of executive decisions. Further, adding expertise to the decision making process also tended to blur the commander’s perspective with the competing institutional agendas and filters of those advising him.
Not surprisingly, to offset this trend towards declining returns on additional investment of time and expertise to staff a decision, senior decision makers typically turn to a small number of selected confidants not necessarily found on organization charts. Commanders using this system also risk biasing the outcome of decisions with “groupthink”—the tendency for groups to seek consensus at the lowest common level of agreement. Judging, however, by frequency of the small informal circle, decision makers view the risk as worth the gain. For this paper, Ellison’s significant conclusion is that senior decision makers do not rely on instinct, but seek to validate flashes of insight by consulting with trusted informal circles, typically small, and not always organizationally defined.

Taken together, Command Decisions and Essence of Decision help illustrate another vital component of generalship—the dialogue of the decision maker. This dialogue does not necessarily follow lines on line and block diagrams—Greenfield’s point on staff advice blurring the commander’s operational perspective may be pertinent. Effective operational leaders acknowledge that intuition is not always an infallible guide, and build an inner circle of confidants to validate what their intuition tells them about a given decision, opportunity or threat.

Eliot Cohen also concentrates on operational intuition and genius in his recent work Supreme Command. Cohen quotes Isaiah Berlin for this description of coup d’oeil as applied to statecraft:

“A capacity for integrating a vast amalgam of constantly changing multicolored evanescent perpetually overlapping data, too many, too swift, too intermingled to be caught, pinned down, labeled.”

A key theme of Cohen’s book is his criticism of what he terms the “normal” model of civil-military relations applied to senior decision making. He faults the Jominian insistence that a state’s political leaders must confine themselves only to their proper sphere of decisions during war. Professional military leaders holding this view believe strategic leadership should not
presume to suggest or judge how a force best achieves a military objective. Rather, political leaders are expected to trust their military leadership, grant them freedom of action to meet the objectives set for it by higher authority, and most definitely not attempt to delve into the details of lower level military decisions.35

A parallel view of the mutual obligations between the strategic, operational and tactical levels of command arguably also prevails in the U.S. military. Joint and service doctrinal publications strongly enjoin the operational and strategic commanders not to intervene in subordinate decisions. The preferred approach is to state broad intent including mission, method, and end state; create an environment of leadership, trust and discipline; and decentralize decisions to the lowest possible command level.36

Cohen takes issue with this model of the optimal relationship between levels of leadership, arguing it does not provide a reliable guide to what does happen or what should happen in conflict. He lauds the best leaders in war—Lincoln, Churchill, among others—as those who master military detail out of a sense of political obligation. In Cohen’s approving view, these political figures fully discharged their responsibilities to their nations and their militaries only by doing so.37

This obligation to guide a nation’s forces in war by questioning, challenging, and even removing lower level leaders not attuned to objectives or political imperatives fits Clausewitz’s view on the fundamentally political nature of war. In this construct of leadership, higher level leaders take a “hand’s on” approach in war, using their intuition to grasp which are the critical among many details, and shaping large issues by acting on selected small ones.

A similar reasoning could apply to operational generalship in war. Following Cohen’s lead, model operational leaders would track many tactical issues in the course of a campaign, while maintaining enough distance from the daily ebb and flow of battle to preserve their operational
perspective. If one accepts this view, generalship is most complete when it brings together perceptive insight, consultative validation, and occasional intervention in the tactical level to ensure opportunities and dangers are grasped.

A much different picture of generalship emerges from net-centric theorists. Building on the conclusion that technology is compressing the time and merging the space in which military actions occur, net-centric theory urges a school of generalship described here as “hands off.” In this view, generals develop the plan, state their intent, push decisions to the lowest possible level and stand back to let the tactical forces go to work. Intermediate levels of command are eliminated because they do not add to the speed or the quality of a decision.

John Arquilla, a leading proponent of net-centric warfare theory, posits “good generalship largely means giving up power today.” In his view, a major component of that power to be surrendered involves decision making. He contends the next generation of Information Age officers will be trained to recognize “power and decision making are going to bubble up from below.”

Another advocate of decentralized decision making in military organizations cites management and behavioral sciences in arguing that

“Empowerment of professionals at the lowest possible levels is the most effective (emphasis added) guarantor of excellence…Liberating the creative genius of people can create a certain complex order in an operation that no central authority could conceive or direct, and that no enemy could fully comprehend.”

The U.S. military is evaluating these contrasting approaches to generalship. At a press conference marking the end of the Joint Forces Command (JFC) exercise Millenium Challenge 02, Major General Cash, Director of JFC’s Joint Concept Development commented:

“Now, what we discovered, not only now is there a chain of command vertical up and down, you come up and -- and again, excuse this term, because I don't know what else to call it, but a "web" of command. And we've started discovering decisions are being made today when, before our experiment, were made up the chain of command. So if I were the two-star in this echelon, I would make this decision; but an MCO2, as the two-star, I didn't even know it was an issue. Is that
good or bad? We don't know. We really need to discuss that. We need to continue experimenting. But say it's good -- and my gut tells me this is great -- it is going to change how we're organized. I may not need all this -- now, this is Cash speaking only -- I may not need all this organization, this staff organization.

VISIONARY GENERALSHIP—OPPORTUNITIES LOST AND FOUND

Moving from theory to practice, one looks to generals themselves for insights on generalship. Following World War II, two outstanding practitioners of operational art published their memoirs. The two held notably similar views on the nature of generalship, despite the widely different nationalities, theaters, and military traditions they represented.

Field Marshals Erich von Manstein and Sir William Slim championed near-autonomous operations and initiative at the lowest level. Both also exercised generalship in a purposeful way to force the enemy to conform to their will and vision. This purpose found expression in occasional interventions at the tactical level. Both note that they resorted to the practice infrequently but regularly when the outcome of the decision was so important that the operational commander must bear the responsibility for it.

Each general praised the commander’s intuition as a critical element of success, but also relied on a cohesive inner circle of confidants—key staff officers and subordinates (typically division commanders within their army groups or corps)—to test their insights. They expected this circle to present honest opinions, especially when they did not agree with commanders’ views on issues. Both fit the bill of generalship at the operational level as a blend of intuition, dialogue, and occasional micromanagement.

Manstein, early in his memoirs Lost Victories praises General von Runstedt as the masterful “exponent of grand tactics… who grasped the essentials of any problem in an instant, indeed he would concern himself with nothing else, being supremely indifferent to minor details.”
Describing his own command style, Manstein took a less detached stance. He remarked that mobile fluid warfare required commanders to command from the front in order to perceive and seize opportunities. He also viewed operational commanders as uniquely positioned to spur the main effort when tactical forces lost momentum due to the fatigue of constant mobile operations—a tendency he argued will increase in future high tempo warfare. Manstein described his ability to recognize culminating points as a product of both intuition and experience:

“I doubt if there is anything harder to learn than gauging the moment when the slacking of an enemy’s resistance offers the attacker his decisive chance.”

Manstein praised established principles of German operational leadership: plan and execute flexible operations and provide maximum scope for initiative and self-sufficiency of commanders at every level. He contrasted this with Hitler’s leadership style, which he criticized as an example of intuition run amok. Hitler trusted his insight completely, made no effort to validate it through consultation, and constantly bypassed commanders to make disastrous operational decisions.

Commenting on micromanagement, Manstein states he intervened in tactical decisions only when the issue was so important and the uncertainty so great that the operational commander must take personal responsibility for the outcome. He distinguishes this kind of “taking the helm” from a senior’s offering unsolicited advice to a lower level commander, which he viewed as killing initiative and hiding responsibility.

Sir William Slim shared Manstein’s perspective on the unique opportunities, and singular responsibility of command at the operational level. Describing the perceptual shift involved in moving from tactical to the operational level (in this case from division command in Iraq to corps command in Burma), Slim uses Clausewitzian language:

“Creation of (the operational formation’s) spirit, and its leadership in battle give you the greatest unity of emotional and intellectual experience that can befall a man.”
Slim critiqued the Japanese operational leadership in Burma in his closing chapter of *Defeat Into Victory*. He described their critical weakness as a moral one. Japanese generals were unwilling to question faulty plans made by superiors or risk adjusting superiors’ plans found wanting in execution. In Slim’s view, this inability to correctly grasp the centers of gravity in a campaign, and the more culpable failure to make decisions or offer advice that contradicted the “accepted wisdom” of seniors lost Japanese commanders the battle of contending wills in Burma. In the terms of the paper’s argument, Japanese operational leaders displayed poor ability to recognize opportunities or dangers in the operational space, and made little use of collaboration within the command structure to improve their perspectives on that space.

**NET-CENTRIC GENERALSHIP**

Fast-forwarding to turn of the 21st century, von Manstein and Slim appear very much alive in ongoing discussions of operational leadership in the net-centric battlespace of contemporary U.S. operations. One of the most controversial of these was Operation Allied Force (OAF). General Wesley Clark, Supreme Commander of NATO and U.S., forces involved, endured scathing criticism for his perceived failure to exercise operational leadership during the campaign. Chief among the many charges he faced in the dock of public and professional opinion was micromanagement.

General Clark himself explained his command style by contrasting the “hands on” school of operational leadership he absorbed in the U.S. Army with the British Army’s perceived greater freedom granted to the commander in the field. On the issue of micromanagement, General Clark defended his concentration on target planning processes in terms of the strategic impact of specific targets. This justification fits Cohen’s and Manstein’s argument that senior leaders are obliged to master detail and intervene in select tactical decisions of operational or strategic import. LtCol
Dumas’ criticism that Clark, as an operational commander, “need(ed) to be fighting the political battle…his subordinate commanders and their staffs need(ed) to be fighting the war,” appears simplistic in this regard.

Firm grasp on a campaign’s centers of gravity, as well as insight into opportunities and dangers are hallmarks of operational perspective. In OAF, the common assumption that limited air strikes would quickly achieve the campaign’s objectives proved inaccurate. In the face of that discredited assumption, Clark then turned to fielded forces as Serbia’s operational center of gravity. Results against Serbian ground units also proved of questionable value in achieving operational objectives.

At this critical juncture, there is little documentary evidence that Clark solicited alternative private views from his primary operational level confidants in the air campaign--the JTF and Air Component Commanders. The use of the video teleconference (VTC) to exchange daily views at the operational level turned what normally might have been a private consultative exchange encouraging frankness into a public “free for all.” This appeared to harden differences among senior commanders when aired before an audience of hundreds.

Judged according to the elements of generalship presented in this paper, General Clark is more open to the charge that he devoted too much energy to tactical details to give himself the “standoff” time, energy, and perceptual distance to develop a better operational perspective. Had he done so, one could argue a better appreciation of enemy centers of gravity and a tenable “Plan B” might have resulted. Slim offers a relevant comment:

"Generals would do well to remember that, even in war, 'the wisdom of the learned man cometh of opportunity of leisure.' Generals who are terribly busy all day and half the night, who fuss round, posting platoons and writing march tables, wear out not only their subordinates, but themselves. Nor have they, when the real emergency comes, the reserve of vigour that will enable them, for days if necessary, to do with little rest or sleep."
A recent JFC operational level exercise--Millenium Challenge 2002--provides another example of operational generalship in the net-centric environment. In the exercise, the opposing force (OPFOR) inflicted significant damage on the friendly naval force with an early and unanticipated strike. Commenting afterwards, General Cash noted with interest that the commander of the Blue naval forces sensed the impending strike by the OPFOR, while his staff and subordinate tactical level commanders did not. Describing how the commander developed his operational insight, Cash highlights the mix of vision and collaboration as the commander drew on:

“Sources of information that are a bit different from the staff because of the collaborative information environment, something we didn’t anticipate. And the power of discourse of commanders all sitting there linked together, talking almost 24 hours a day…and commanders getting a sense, because of their wisdom and judgment of past experiences, they’re saying, the recommendation from the staff is not matching my gut feel.”56

Turning lastly to the recent U.S. campaign in Iraq, initial press reporting generally endorses the “hands off” school of operational leadership. Accounts describe General Franks and his component commanders building a sound plan, articulating coherent and specific commanders’ intents’, and then monitoring the plan’s execution while not interfering in tactical decisions.

Reportage on specific operational decisions during Operation Iraqi Freedom tells a slightly different story. Representative is the account of a key decision made on March, 25th, 2003: whether to continue the drive on Baghdad despite growing resistance and inclement weather. In a VTC, three operational level commanders--Ground Component Commander LTG McKiernan in Kuwait, V Corps Commander LTG Wallace and Lt Gen Conway, Marine Component Commander--discussed the issue. General Wallace reportedly argued the main effort should slow its speed of advance to respond to growing threats to lines of supply and communication to the rear. General Conway recommended the advance continue to preserve the advantage of tempo attained thus far and threaten Baghdad earlier than expected by Iraqi forces. General McKiernan decided to continue the advance.57
Another press account describes General Franks “consistently driving his ground commanders to take risks” during the execution of the campaign plan. Franks directly communicated with operational and perhaps the tactical levels to reconfirm his intention that ground forces speed the pace of advance.\(^{58}\) This account recalls Manstein’s point that one of the operational commander’s key roles is to spur the main effort despite flagging tempo at the tactical level resulting from fatigue.

This brief excursion into instant history does not claim these reports are ground truth in every detail. The adage “the first report is always wrong” will probably prove true for these accounts as well. The examples, however, serve to demonstrate that operational commanders still have decisions to make at the operational level, even in a net-centric battlespace. Information technology facilitated those decisions, but senior commanders made them, based on the level of the objective, the commander’s perception of fleeting advantage compared to potential risk, and interaction with peer confidents to validate “gut feel.” The wisdom and intuitive sense these generals applied to these decisions endures as an irreplaceable element of generalship that Thucydides, Clausewitz, and Slim would all recognize and honor.

**CONCLUSION**

This paper has taken up two general questions concerning the future of operational generalship in a net-centric environment. Three propositions emerge:

--The Operational level of war remains intact, as do decisions unique to that level of war.

The operational commander exercises good generalship by consciously exerting his will on campaign planning and execution—using Operational Art to link tactical actions with
strategic objectives.

--Operational commanders have a unique perspective on the battlespace. This intuitive grasp distinguishes the best leaders in war. Leaders temper this intuition with the wisdom of experience and the counsel of close and trusted advisors to grasp and exploit opportunities (and perceive dangers) at the operational level.

--Operational commanders also exercise generalship by micromanaging at critical junctures. Such micromanagement is not consistent with the doctrinal template of centralized command/planning, decentralized execution but is consistent with a collaborative planning/execution model.

General Cash captures the essence of the collaborative process in his description of the “web of command.” Webs of command are increasingly common to U.S. C2 structures in net-centric environments such as Kosovo and Iraq. These webs are different from the net-centric view of devolving generalship in that they remain at the operational level, are small, senior, and experienced.

Regarding micromanagement, the answer to the question posed in the title is “a little bit of both.” Operational commanders intervene in tactical decisions. The most successful generals micromanage selectively, when issues are so important that they can only be resolved (and perhaps only recognized) at the operational level. Historically, most operational commanders have been “hands-on” for high priority issues--targeting and rules of engagement come to mind in the modern context. This pattern fits Cohen’s thesis that the best senior leaders at war intervene to play an
active part in resolving a select few tactical issues with significant operational or strategic implications.

These propositions sound a note of caution about restructuring command and control in the net-centric battlespace. Command designs that reduce the scope of generalship in favor of a decentralized self-synchronizing structure may lose the “value added” perspective brought by intermediate levels of command. In depriving a command structure of most of its generals, a C2 doctrine deprives itself of their unique vision and wisdom, and thereby risks missing opportunities and dangers for unfolding campaign plans.

Ultimately, operational commanders bear the responsibility for the outcomes of their decisions. It is not unreasonable for them to ensure they make the most important of those decisions, rather than expect them to bubble up from below. Moreover, as this paper has worked to demonstrate, operational leaders are the right people to make operational decisions. They bring the unique wisdom and intuition military history vouchsafes as the essence of generalship.
ENDNOTES

1 Sun Tzu, de Saxe, and Jomini are among the classic military theorists who focus on the art of generalship prominently in their writings.


3 For the purposes of this paper, generalship is a term applied broadly to uniformed general and flag officers of any military service making operational decisions in war.

4 Karl Clausewitz, On War, (New York: Penguin Books 1968. Translated by Col J.J. Graham, 1908) 164 (Book One, Chapter Seven)

5 See John Keegan’s discussion of the schools of military historiography in The Face of Battle (New York: Viking 1976) tracing the origins of historical studies of great generals and their campaigns, 54-78

6 Several of the authors contributing to In the Camp of Athena, John Arquilla, ed. (Washington, D.C, Rand 1997) hold this view. Representative chapters include Norman Davis’ “An Information-based Revolution in Military Affairs” (91-95) and John Arquilla and David Ronfeldt’s “Looking Ahead: Preparing for Information Age Conflict” (462-464).


8 RADM Holland looks at the prospects for eliminating layers of naval operational command in “Where Will all the Admirals Go?” Proceedings of the U.S. Naval Institute, May 1999. 36-40

9 Clausewitz, On War, 153-155. See also Peter Paret’s chapter on Clausewitz in Makers of Modern Strategy, Peter Paret, ed. (Princeton, NJ, Princeton University Press 1986) 186-213

10 Clausewitz, On War 197-200 (Book II, Chapter II).

11 Paret, ed., Makers of Modern Strategy 201

12 Clausewitz, On War 243 (Book III, Chapter I)


14 Arquilla and Ronfeldt, “Cyberwar is Coming,” In the Camp of Athena, 37, and Jeffrey R. Cooper, “Another View of the Revolution in Military Affairs,” In the Camp of Athena.

15 Luttwak, Strategy, 89, 100-101.

16 Milan Vego, Operational Warfare (Newport, RI Naval War College 2000) 1-3.


18 Joint Staff, Joint Pub 3-0, (Washington, D.C. 10 September 2001) GL-15


21 Davis, “An Information-based Revolution in Military Affairs” In the Camp of Athena 92.

22 Arquilla and Ronfeldt, “Looking Ahead: Preparing for Information Age Conflict,” In the Camp of Athena, 465-477


24 Department of Defense, Transformation Planning Guidance, (Washington, D.C., Office of the Secretary of Defense Apr 2003). See especially the TPG’s appendix on Joint Planning Guidance (32-33), which sets forth guiding principles for the Joint Operations Concept. Among them: “Dynamic Self Coordination—increase freedom of low-level forces to operate near autonomously and re-task themselves through exploitation of shared awareness and commander’s intent.”


26 Vego, “Net-Centric is Not Decisive”

27 Vego, Operational Warfare, 640.

28 Clausewitz, On War, 142.


30 Ibid., 5.


32 Ibid.,


34 See John Shy’s chapter on Jomini in Makers of Modern Strategy for an analysis that the “normal” theory of civil-military relations Eliot Cohen credits to Samuel Huntington in Supreme Command has its roots in Jomini’s writings.

35 Cohen, Supreme Command
See MAJ Kolenda’s paper “Transforming How We Fight, A Conceptual Approach,” in The Naval War College Review, Spring 2003 for a presentation of this view.

Cohen, Supreme Command, Chapter

RADM Holland’s article on this subject has already been noted. See also Arquilla and Ronfeldt, In the Camp of Athena, 463

“From Desert Storm to Desert Swarm,” interview with John Arquilla, Business Week Online

www.businessweek.com/print/technology/content/apr2003/tc20030402_9330_tc124

Ibid.

Kolenda, “Transforming How We Fight, A Conceptual Approach”

Ibid.


These conclusions are drawn from reading the respective generals’ memoirs—Field Marshal Erich von Manstein, Lost Victories (Chicago, IL, Henry Regnery Company 1958) and Field Marshal Sir William Slim, Defeat Into Victory (London, Cassell 1956).

Slim, Defeat Into Victory, 294

von Manstein, Lost Victories, 23

Ibid, 188

Ibid., 284-285

Ibid., 383

Slim, Defeat Into Victory, 3

Ibid., 536-538


Ibid., 12

This conclusion is the author’s own, based on regular attendance at EUCOM VTCs broadcast during Operation Allied Force in 1999.

Slim, Defeat Into Victory, 213

“Briefing on Lessons Learned from Millenium Challenge 02,” InsideDefense.com, 12 September, 2002


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