STRATEGY
RESEARCH
PROJECT

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AN UNDERGRADUATE FOUNDATION FOR STRATEGIC LEADERS

BY

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USAWC STRATEGY RESEARCH PROJECT

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ABSTRACT

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The assumption upon which this paper rests is that the overall development of a strategic leader begins with education at the undergraduate level. It is manifestly true that a college education, regardless of its quality, cannot by itself create a strategic leader. Development of strategic leaders is a long-term process that also includes education and training in branch schools, command and staff colleges, and senior service colleges, as well as experience gained in the course of a variety of assignments. The purpose of this paper is to examine how to best approach the precommissioning component of officer education, presuming that the primary purpose of undergraduate study is to lay a foundation for future strategic leadership.

As a starting point, a widely accepted model of strategic leadership is examined to ascertain the critical intellectual competencies necessary for one to develop the capacity to create and to implement a strategic vision, which is arguably the distinguishing characteristic of strategic leadership. Then, the ongoing revolutions in military and international affairs, which are currently defining the nature of the strategic environment, are considered to identify the knowledge base required for a future strategic leader to function effectively. Based on this analysis—and taking into account that time in school is limited—it is suggested that an ideal curriculum for laying the foundation for strategic leadership would be organized around following six academic goals: (1) understand the philosophical underpinning of American society; (2) understand how the American political system functions; (3) understand the nature of scientific revolutions and how they affect society; (4) understand the impact of the information age upon human psychology; (5) understand how globalization affects the strategic environment; and (6) understand how democratization affects the strategic environment. It is further suggested that the pedagogical approach best suited for meeting most of the above goals is the "Great Books" method accompanied by a well-articulated program in critical thinking.

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PREFACE

As a member of the senior faculty at the United States Military Academy since 1996, I have had the privilege of working with many dedicated professionals who devote themselves to providing cadets a first-rate education. We do what we do well, but is what we are doing the right thing? This is not a trivial question in light of the fact that the world is changing at a rapid rate—witness the revolution in military affairs and the emergence of globalization. The current purpose of the academic program at the Academy is to provide cadets an intellectual foundation for service as commissioned officers who can "anticipate and respond effectively to the uncertainties of a changing technological, social, political, and economic world." As an intellectual exercise, I decided to examine the implications of replacing this broad purpose with the following statement: *to provide cadets an intellectual foundation for their development as future strategic leaders.* This paper represents the results of my analysis of this issue.

The year that I have spent at the U.S. Army War College as a West Point Fellow has provided me a welcome opportunity to consider the curriculum at the Academy with a sense of detachment and to contemplate how what we do at U.S. Military Academy relates to the Army as a whole. Two individuals merit acknowledgement for supporting my work. Without the enthusiastic encouragement of Dr. Robin Dorff of the Department of National Security and Strategy, I would not have elected to take on such a potentially controversial subject. Colonel Jeffrey D. McCausland, the Dean of the U.S. Army War College, served has my project advisor and provided invaluable help in clarifying my thinking on the education of strategic leaders. I owe both of these gentlemen a debt of gratitude.

AN UNDERGRADUATE FOUNDATION FOR STRATEGIC LEADERS

> Clausewitz made good use of the excellent library of Frederick the Great's brother Prince Henry, which was open to the officers of his regiment, and he acquired a deep practical interest in education; activities it may be assumed, that did not engage the interests of his fellow subalterns quite so profoundly. It must nevertheless have come as something of a relief when in 1801 he was transferred to Berlin to attend the newly opened War College under the direction of Gerd von Scharnhorst. It was now, at the age of nineteen, that his career really began.[1]
>
> ——Michael Howard

As military officers rise to the rank of colonel and beyond, they become increasingly more involved in the formulation of both the military strategy and the grand strategy for our nation's defense and for the advancement of its goals. At the United States Army War College, the first phase of the year-long curriculum is devoted to inculcating the fundamental attributes of strategic leadership into students with vastly different experiential backgrounds. The school's purpose is to elevate the perspective of each student from the tactical or operational level to the strategic level, which enables officers to not only lead large military organizations but also to provide sound advice to our civilian leadership. The extent to which the Army War College is successful in producing strategic leaders is an open question—and a question that would be exceedingly difficult to answer objectively. However, it is reasonable to suppose that the extent of prior academic preparation is directly correlated to the degree of success in making the transition to the strategic realm of thinking. By extension, it is logical to expect that inadequate prior preparation will necessarily limit how far the War College can expect to expand the horizons of a given student.

The basic assumption underlying this study is that the overall development of a strategic leader starts with education at the undergraduate level. It is manifestly true that a college education, regardless of its quality, cannot by itself create a strategic leader. Development of strategic leaders is a long-term process that also includes education and training in branch schools, command and staff colleges, and senior service colleges, as well as experience gained during a variety of assignments. The purpose of this paper is to examine how to best approach the precommissioning component of officer education, presuming that the primary purpose of undergraduate study is to lay a foundation for future strategic leadership. The implications of adopting the development of future strategic leaders as the academic purpose at the United States Military Academy is examined in the final section of this paper.

What then constitutes an ideal undergraduate education for the aspiring strategic leader? The consideration of this question requires both an understanding of the essential—and perhaps immutable—aspects of strategic leadership and an appreciation for dynamics in the strategic environment that are peculiar to our times. Thus, the next section of this paper begins with an examination of the nature of strategic leadership, especially as related to leaders of the 21st century.

STRATEGIC LEADERSHIP IN THE 21ST CENTURY

How we prepare future strategic leaders depends upon the nature of strategic leadership, which certainly has aspects that are as timeless as the principles of strategy espoused by Clausewitz and Sun Tzu. Any program aimed at developing strategic leaders should seek to nurture these qualities. However, internalization of general principles is not in itself sufficient to produce competent leaders. Strategic leadership is practiced within the constraints of the geopolitical environment, so that an understanding of this environment is also required of the strategic leader. Consequently, a key challenge facing those tasked with producing tomorrow's leaders is anticipating tomorrow's strategic situation. In this section, the general nature of strategic leadership is reviewed along with important geopolitical trends that should influence the way that strategic leaders are developed.

VISION: THE DEFINING CHARACTERISTIC OF STRATEGIC LEADERSHIP

Strategic art has been defined as "the skilful formulation, coordination, and application of ends, ways, and means to promote and defend the nation's interests."[2] Strategic leaders orchestrate the practice of the strategic art. In this paper, "strategic leadership" is defined broadly to encompass the entire "corporate leadership" of the military. By this definition, strategic leaders not only include those in obvious positions of responsibility, e.g., the chairman of the joint chiefs of staff, commanders-in-chief of unified commands, and the service chiefs, but also include members of the various joint staffs and the service staffs, as well as officers serving with policymaking agencies, e.g., the Office of the Secretary of Defense, the State Department, and the National Security Council. This reflects the view that virtually all senior officers in some way contribute to the making of strategy. On the other hand, Lieutenant General Richard Chilcoat, former commandant of the U.S. War College, differentiates between strategic leaders, strategic practitioners, and strategic theorists.[3] This distinction is not germane to this study, since it is assumed that the undergraduate preparation for each of these classes of strategist would be the same.

What is it that sets strategic leadership apart from leadership at the tactical or operational levels? Here a consideration of the scope and the time scale of strategic ends, ways, and means is useful. At the tactical and operational levels, the ways and means are almost purely military in nature. By comparison, at the strategic level all elements of national power—military, economic, and political—must be deftly integrated to achieve the desired ends. And unlike the ends associated with tactical or operational problems, e.g., seizure of a well-defined objective within an specified time frame, strategic ends often reside in the distant future and relate to the establishment of general conditions rather than to a well-defined state of affairs. In fact, the entire conception of a *strategic end* may be misleading in the sense that it connotes arrival at a sort of temporal nirvana in which security threats no longer exist. It is more realistic to view the formulation and execution of grand strategy as a perpetual struggle to manage the nation's (changing) interests with the ends never truly being realized but rather forever remaining in the future. Of course, this dilemma is a fundamental problem of strategy and as such is not unique to the circumstances faced by the United States in the aftermath of the Cold War. For example, Edward Luttwak made the following observation when describing the strategic situation that confronted the Roman Empire during its latter years:

> The Romans did not face a single enemy, or even a fixed group of enemies, whose ultimate defeat would ensure permanent security. Regardless of the amplitude of Roman victories, the frontiers of the empire would always remain under attack, since they were barriers in the path of secular migration flows from north to south and from east to west. Hence Roman strategy could not usefully aim at total victory at any cost, for the threat was not temporary but endless. The only rational goal was the maintenance of a minimally adequate level of security at the lowest feasible cost to society.[4]

Thus, the world of the strategic leader is fundamentally different than that of the tactical or operational leader. The level of complexity is greater by orders of magnitude as the strategic leader grapples with dimensions of national power outside the purely military, and it is apparent that the degree of complexity has been increasing over the past decade as evidenced by peacekeeping operations in the Balkans where tactical decisions can often have strategic consequences. In the absence of concrete ends, the strategic leader must possess the capacity to derive a focus for national strategy from often vague, confusing, and ambiguous indicators and must be able to confidently foresee required changes in strategy in time for effective implementation. This suggests that a defining characteristic of strategic leadership is the ability both to formulate a *strategic vision* and to effectively act in furtherance of that vision.

The vital importance of strategic vision is well known.[5] Strategic vision serves to provide an organization its sense of direction over mid- to long-term time frames, from as many as 10

years to over 50 years. Properly defined, vision draws upon the values of the organization to mobilize and synchronize the efforts of the individuals who comprise an enterprise. To be effective, a strategic leader must possess several classes of intellectual competency—conceptual, technical, and interpersonal—in order to create and sustain a vision.[6] The development of such competencies is arguably the principal task in the process of producing strategic leaders, and therefore further examination of these terms is warranted.

Conceptual Competencies

Conceptual competencies include frame-of-reference development, problem management, and envisioning the future.[7] Without these interrelated mental capabilities, a prospective strategic leader would be ill equipped to deal with the extreme complexity of the strategic environment in which no perfect solution exists for most problems, risks must be understood and accepted, and second- and third-order effects of virtually all actions must be anticipated.

A frame of reference is a conceptual structure that allows one to organize information concerning the strategic environment, so that timely and consistent judgments can be made. It must be sophisticated enough to allow appreciation of what is important in any situation but at the same time must also be simple in design so that mental paralysis is prevented. The following three traits facilitate the creation of a frame of reference: open-mindedness, reflectiveness, and proficiency with the basic principles that govern the elements of national power. The first two attributes relate to thought processes while the third connotes the understanding of a specific body of knowledge.

Problem management is distinct from the direct problem solving that is practiced at the tactical level and that is the object of much traditional classroom instruction. Unlike the problems confronted at the tactical level (or the well-structured problems encountered in school), strategic problems involve multiple competing issues, a lack of clarity, and extended time lines. Furthermore, devising detailed answers to most strategic problems is beyond the grasp of any single individual. The strategic leader must therefore be capable of managing the problem to produce a timely, adequate, and cost effective course of action. This places a premium on the leader's ability to separate relevant from irrelevant issues, to recognize critical deficiencies in the available information, and to accept risk that arises from lack of clarity and ambiguity. Without the ability to manage problems, the leader will be unable to marshal the creative resources upon which he must rely.

Envisioning the future is the capability to recognize important trends so that plausible future scenarios can be extrapolated from present conditions. Of course, this competency is a vital prerequisite to—but is not precisely the same as—the formulation of a strategic vision. It rests upon an understanding of history and upon the existence of a well-conceived frame of reference. Since the future can never be known with certainty, the strategic leader's perception of the future must be accompanied by an acknowledgment of the risks inherent to making forecasts and an awareness of the indicators associated with establishing the reliability of the prediction.

Technical Competencies

Technical competencies required for the military strategic leader include systems understanding, understanding of joint and combined relationships, and political and social competence.[8] These competencies relate directly to the environment in which the leader functions.

Systems understanding at the strategic level is less concerned with understanding one's own organization than it is with understanding the broader governmental structure in which the leader's organization functions. This may include developing an understanding of the various services, the Department of Defense, and the other executive agencies that participate in the interagency process. Such knowledge allows the leader to appreciate the responsibilities of the various players within his arena as well as his own role in the process.

Related to systems understanding is understanding of joint and combined relationships. This competency is required to insure that interoperability can be achieved. It goes beyond technological aspects of interoperability to include a sophisticated understanding of the cultures of other services and of the militaries of other nations.

Political and social competency relates to an awareness of the political and larger social implications that attend the formulation of national strategy. An understanding of how our government functions is essential as well as adroitness at operating among politicians, bureaucrats, and representatives of nongovernmental organizations. Finally, without a clear appreciation of the values upon which our society is based, it is doubtful that sustainable strategy can be implemented.

Interpersonal Competencies

Interpersonal competencies include consensus building, negotiation, and communication.[9] When one considers the size and complexity of organizations at the strategic level, coupled with the fact that time horizons associated with strategic objectives are often extended, it is apparent

that it is seldom possible for a leader to unilaterally forward his agenda. Rather, negotiation and consensus building, within and without the organization, is the rule. Of course, communication skills remain as essential at the strategic level as they were at the tactical and operational levels. While precision in communication is always important, it takes on even greater significance at the strategic level, if for no other reason than that the stakes are higher.

THE EMERGING STRATEGIC ENVIRONMENT

Much has been made of the fact that in the aftermath of the Cold War we face a strategic situation that is volatile, uncertain, complex, and ambiguous.[10] A relatively stable bipolar confrontation that endured over 40 years has given way to the ascendance of the United States to the position of being the only global superpower. Yet our relative power has not translated to an uninhibited ability to shape affairs as we like them to be. Widespread political instability, the proliferation of weapons of mass destruction, and regional economic crises continue to frustrate our best efforts to find and implement solutions. Direct threats to our homeland are more credible today than they were during the reign of the doctrine of "mutual assured destruction." It appears that we are in the midst of a time of "strategic pause," as the international system readjusts to some sort of a quasi-stable equilibrium. The form that this equilibrium will take is an open question, although various proposed scenarios range from the very positive to the decidedly pessimistic.[11]

Since we cannot know the future with certainty, all we can hope to do as we prepare strategic leaders for the future is to equip them with the mental faculty and versatility to adapt to whatever strategic environment eventually emerges. This endeavor need not be without direction—the outcome of two "revolutions" will largely govern the future strategic scene. The first, the now familiar revolution in military affairs, directly affects military strategy, but also will naturally influence grand strategy. The second, which will here be referred to as the "revolution in international affairs," relates to the emergence of a tightly integrated global economic system based upon free-market capitalism and to the ascendancy of liberal democracy. It has been given less attention in military circles but may be the more important in terms of determining grand strategy.

The Revolution in Military Affairs

A revolution in military affairs can occur when major technological advances impel the creation of new operational concepts, organizational structures, or both. At present, it is commonly believed that we are in the midst of a revolution in military affairs involving the

following interrelated themes: (1) mobile, long-range, precision weaponry, (2) information operations, and (3) space operations.[12]

Continued improvement of high-technology weapons first demonstrated during Desert Storm, e.g., cruise missiles and laser-guided bombs delivered by stealth aircraft, will provide us the capability to strike and destroy targets throughout the battlespace at the time of our choosing. In principle, we could simultaneously attack enemy centers of gravity at the tactical, operational, and strategic levels, leading to a collapse of the enemy's capacity to coherently wage war. The identification and location of centers of gravity are necessary prerequisites to the effective employment of our advanced arsenal. Similarly, detailed knowledge of the status and location of our weapon systems will be necessary for the synchronized attack envisioned above. Thus, situational awareness will be the key to optimizing the effect of precision weapons; this demands dominance in the realm of information operations.

The possession of timely and accurate information—concerning both the enemy forces and friendly forces—has always been a key to success on the battlefield. Rapidly occurring advances in information technology, especially computers and communications systems, provide the promise of acquiring and disseminating relevant information in near-real time. This has enormous implications for intelligence, targeting, and even logistics. Our ability to protect and utilize our information systems while degrading those of the enemy will likely be the key to success on the battlefield of the future. Therefore, development of concepts and doctrine relating to information operations should be the central focus of efforts to transform the military.

Space operations are critical for enabling information operations. Communications, global positioning, weather forecasting, surveillance, and reconnaissance are all highly reliant on space-based systems. Our ability to access and to protect these systems (and their related ground-based stations), while denying the enemy use of his systems, will be a key dimension of our dominance of information operations.

Of course, the revolution in military affairs is not solely occurring in the United States; it is a worldwide phenomenon. Furthermore, our desire to capitalize upon it is no secret. Looking into the future, we must not be blinded by the potentially great advantages that the revolution in military affairs may bring to us; we must also remain aware that our adversaries will take actions to diminish our technological edge. Various potential rivals, e.g., China, may eventually have the wherewithal to challenge us on a coequal basis. Weaker opponents, who have no reasonable hope of matching our military power, will seek asymmetric means to attack critical components of our transformed military (e.g., computer networks and satellite systems) or to directly weaken our national will, perhaps through the employment of weapons of mass

destruction. Thus, strategic leaders will have to carefully consider the implications of the revolution in military affairs with respect to protection of our own centers of gravity.

The Revolution in International Affairs

As the revolution in military affairs coalesces, we appear to be well into another revolution that is transfiguring the strategic landscape, this one involving the very nature of the international system. This revolution in international affairs has two defining features. The first, globalization, has been facilitated by the explosion in information technology. The second, the ascendancy of democracy, derived from our victory over communism in the Cold War.

Benjamin Barber has pointed out that "economic and ecological forces are pressing nations into one commercially homogeneous global network."[13] From a historical standpoint, the tendency toward such integration is nothing new. Since ancient times, several factors, e.g., trade, conquest, religion, and the study of the classics, have served to reduce the distinctions between peoples.[14] The fundamental difference today is that the integration is progressing on a truly global scale at a dizzying rate. This is a consequence of the coming of the information age, which is itself a product of monumental advances in information technology that has spawned an international media (e.g., the Cable News Network) and amorphous, worldwide, information networks (e.g., the Internet). In his astute analysis of the emerging international system, *The Lexus and the Olive Tree*, Thomas Friedman identifies free-market capitalism as the driving force behind globalization and suggests that the dominant cultural dimension of globalization is "Americanization," owing to the relative strength of the U.S. economy.[15]

Globalization poses several challenges to the strategist. The economic element of power has assumed more significance owing in part to the fact that local actions will rapidly be felt throughout the global economy. For example, a currency crisis in Thailand in the late 1990s first precipitated a Southeast Asian recession that then caused a collapse of the Russian economy and was eventually felt by American financial markets.[16] Thus, wielding economic power has become an extremely delicate matter, which requires careful consideration of second- and third-order effects. Globalization is also changing the environment in which the diplomatic element of power is employed because economic integration and unhindered information flow have caused a marginalization of national borders that is consequently weakening the existing system of Westphalian nation-states. In this new world order, nonstate entities (even individuals), empowered by the Internet, are better able to mobilize support for their various causes and have become significant players in international politics. For example, Jody Williams won the Nobel Peace Prize in 1997 for her effective advocacy of a ban on

landmines, which she accomplished by using email to marshal the efforts of over a thousand human rights and arms control groups.[17]

Globalization might ultimately contribute to a more peaceful world order in which common interests bind people together. However, conflict based on economic disparity remains a problem as those people who are slow to adapt or are unable to acquire the skills to participate in the global economy are left behind. Similarly, there may arise a backlash to Americanization that some may see as an assault on traditional values. The free flow of information that enables the global economy may also exacerbate the resentment felt by these economically or culturally disenfranchised people. Faced with the uncertainty of a world evolving so quickly that it may tax the capacity of the human mind to adapt, many people may seek the comfort of stability through religious, ethnic, or nationalistic identification. Thus, the process of globalization may not be entirely beneficial—or even benign—it might also contribute to dangerous fragmentation of the world order. In this respect, the potential negative consequences of the revolution in international affairs may offset the gains that we expect to reap from the revolution in military affairs.

Since the end of the Cold War, there has occurred an extraordinary movement of nations away from repressive forms of government and towards democracy. A cornerstone of our present national security strategy is to promote and to protect the advance of democratic and free-market institutions.[18] This strategy is no doubt based on a fundamental assumption that democracies do not go to war with other democracies, so that the spread of democracy is equivalent to the spread of stability and peace. Promoting *functioning* democracies is a complex process, for it involves not only insuring the right of people to choose their government, but also involves the establishment of institutional structures like freedom of the press, civilian control of the military, and a system of law that guarantees respect for human rights. The progress that can be expected in our efforts to expand democracy will likely vary from country to country, depending on the present state of the government of each country and on its traditions and history. Success will depend upon having strategists who not only understand the nation in question but also have a firm grasp of what the American brand of democracy is all about. The latter point may seem obvious, but it may well be underappreciated.

UNDERGRADUATE EDUCATION FOR FUTURE STRATEGIC LEADERS

In the previous section of this paper, fundamental competencies required for strategic leadership were described, and major trends in the strategic environment that will affect prospective leaders were identified. It is not realistic to expect any four-year undergraduate

experience to produce fully formed strategic leaders because of obvious time limitations that restrict how much knowledge can be imparted to students and because of the fact that many competencies cannot by their very nature be developed in an academic setting. Thus, the pertinent question is: What foundation for strategic leadership can one reasonably expect to convey to undergraduates? Examination of this question is the focus of this section of the paper and will be pursued along two lines. First, it will be argued that only a limited number of the leadership competencies discussed above stand out as being accessible within the domain of undergraduate education, and ways to promote these competencies will be suggested. Second, the essential knowledge-base required to cope with the ongoing revolutions in military and international affairs will be described.

FUNDAMENTAL COMPETENCIES FOR VISIONARY LEADERS

As was discussed earlier, the defining attribute of a successful strategic leader is the ability to formulate and act upon a vision for his organization. This requires the possession of specific conceptual, technical, and interpersonal competencies that are developed over time. Which of these competencies should be included in the design of an undergraduate program for strategic leadership?

Of the three conceptual competencies, "frame-of-reference development" is preeminent because without a suitable frame of reference one cannot be expected to ultimately attain much facility either in "problem management" or in "envisioning the future." Furthermore, skill at problem management is primarily developed through progressive experience gained in dealing with real-life situations, while acquiring the ability to envision the future is contingent on having first formed a comprehensive frame of reference. Therefore, the former is not appropriate for an undergraduate program, and the latter should only be considered for inclusion in a program if time allows after significant progress has been made in developing a frame of reference. Traits essential to the development of a frame of reference, open-mindedness and reflectiveness, are characteristic products of a liberal education. Furthermore, formation of a frame of reference for a future strategic leader requires the assimilation of a broad core of relevant knowledge that can most effectively be learned in a scholastic environment. This fundamental competency will be further addressed later in this paper, since its development should be the central theme in the undergraduate education of future strategic leaders.

The two technical competencies that directly relate to how the national security establishment is organized, "systems understanding" and "understanding of joint and combined relationships," are best developed through experience gained through a sequence of

progressive assignments augmented by well-timed attendance at a staff college and at one of the senior service colleges. While it may be desirable to introduce these subjects to undergraduates, it should not be a priority. On the other hand, "development of political and social competence" can, and should, be initiated. The focus here should be upon learning about how our political system is organized and upon how our society has evolved since the founding of the Republic. Not only will such education form the basis for developing political and social competence, it also is an important part of the development of a conceptual frame of reference.

Some enhancement of the interpersonal competencies ("consensus building," "negotiation," and "communication") will occur as a natural consequence of the student-instructor and student-student interaction that occurs in and out of the classroom, if the learning environment is carefully designed to promote lively interaction. Of these three competencies, the most fundamental is skill at communication, since it is clearly a prerequisite to the other two. For this reason, it warrants special attention when one conceives an academic program. The development of speaking and writing skills should be a major theme throughout the curriculum, not just relegated to a handful of specialized courses.

Above, it has been contended that only a few of the various competencies—frame-of-reference development, political and social competency, and communication skill—can be fruitfully addressed at the undergraduate level. Within this limited set, frame-of-reference development is arguably of dominating importance. Allan Bloom has argued that the purpose of a true liberal education is to help students to pose the question, "What is man?," which necessarily precedes the question, "Who am I?"[19] The process of forming answers to these questions is the first step in creating one's frame of reference. In the context of preparing strategic leaders, the guiding question can be restated as: What does it mean to be an American? Unfortunately, the ascendancy of cultural relativism throughout our educational system has served to render anything other than the most superficial consideration of this question as *de facto* evidence of narrow-mindedness and chauvinism.[20] As we prepare the next generation of strategic leaders, we must resist the influence of the forces of cultural relativism because in a world where all ideas and ways of life are to be accorded equal value, how can we hope to develop leaders who are able to confidently and consistently form a strategic vision when functioning in the competitive global arena?

But how can one discover what it is to be an American? Simply reading the Declaration of Independence and the Constitution is inadequate. Similarly, accumulating facts about American history will not do. What is needed is a firm understanding of the philosophical underpinning of

the system created by our Founding Fathers. This involves careful consideration of the roots of today's American democracy, which extend back through the Enlightenment to the world of Socrates and Aristotle. Allan Bloom has concluded that the only serious way to tackle this daunting endeavor is the so-called "Great Books" approach.[21] His seminal book, *The Closing of the American Mind*, simultaneously exposes the inadequacies in our current system for higher education and implicitly offers an exhaustive reading list of the classics that could constitute the basis of an authentic liberal education. Bloom's recommendation provides a plausible approach to forming an intellectual foundation for our future strategic leaders.

As Bloom is quick to point out, it is naive to think that simply prescribing books for students to read will be an effective way to impart a liberal education.[22] Not only must knowledge be accumulated, students must also learn how to engage in critical thinking. Most, if not all, educational enterprises profess to teach critical thinking. However, it is often the case that neither teachers nor students understand what critical thinking really is, that intellectual standards for the teaching of critical thinking are vague or absent, and that most teachers are ill equipped to engage students in higher-order thinking.[23] Fortunately, there is a movement afoot in this country that advocates the effective teaching of critical thinking, which has been spearheaded by Richard Paul. In his book, aptly titled *Critical Thinking: How to Prepare Students for a Rapidly Changing World*, Paul sets out clear criteria for the teaching of critical thinking and offers practical advice on how to introduce critical thinking into an academic program—a nontrivial task. In simple terms, Paul defines critical thinking as "thinking about your thinking while you're thinking to make your thinking better."[24] The accomplished critical thinker is intellectually disciplined, self-critical, fair-minded about the views of others, and adaptable to changing conditions. These are clearly attributes required for the development of a solid frame of reference and for the exercise of effective strategic leadership.

PREPARATION FOR THE FUTURE STRATEGIC ENVIRONMENT

A significant part of readying a young officer to deal with the concurrent revolutions in military and international affairs is to form an intellectual frame of reference that as indicated above includes the development of critical thinking skills. Beyond this, the balance of a four-year undergraduate program for budding strategic leaders could be devoted to specific preparation for the emerging strategic environment. Of course, the challenges are to identify what should be taught and to determine what can be learned in the limited time available.

Since the current revolution in military affairs is being driven by technological advances, it is tempting to think that all prospective leaders should be immersed in science and engineering

courses, especially those relating to electronics and information technology. Indeed, this approach is advocated in a 1996 report by the Army Science Board, which has proposed that the precommissioning education of all officers include at a minimum eight courses in science, mathematics, or engineering.[25] It is noteworthy that the Board provides no guidelines as to which specific courses should be taken—the implicit assumption being that any exposure to technology will serve the purpose. However, if one argues that precommissioning education should be focused on the development of future strategic leaders, then what it is that constitutes technological literacy for a strategic leader must be carefully defined, for this will significantly influence the design of the curriculum. With respect to the ongoing revolution in military affairs, fundamental technological literacy should have two components. First, every aspiring strategic leader must gain an understanding of how scientific revolutions occur and of how they impact warfare, politics, and societies; a way to approach this is through historical studies that would necessarily include exposure to fundamental scientific principles. Second, information warfare should be given special consideration because of its dominating role within the current revolution in military affairs. However, the focus of education relating to information operations should not be upon detailed aspects of information technology but rather should be concerned with how humans interact with, respond to, and cope with the mass of information that pervades the digitized battlefield.

Recall that the revolution in international affairs has two defining features: globalization and the spread of democracy. To understand the globalized international system and to comprehend its possible consequences, strategists require education in three areas. First, basic study of economics, political science, and international relations is required to gain an understanding of the systems that are being affected. Second, consideration of the progression of globalization from a historical standpoint should provide context for what is currently occurring and what can be expected in the future. And third, awareness of the psychological impacts on individuals and groups of the rapid flow of information must be cultivated. With respect to the spread of democracy, to gain a realistic appreciation of the opportunities and limitations that confront us as we promote the proliferation of democratic institutions, prospective strategic leaders must understand the philosophical traditions that underlie the founding of the American Republic and must comprehend how our government has evolved over time. Of course, this is largely a part of frame-of-reference development, which was described previously in this paper.

A CASE STUDY: ACADEMICS AT THE UNITED STATES MILITARY ACADEMY

The United States Military Academy at West Point has produced leaders for the Army for almost 200 years. By its very nature, it is a conservative institution, steeped in tradition and resistant to rapid change. It can be argued that in the past constancy has been a strength of the Academy. However, if we are truly in the midst of simultaneous revolutions in military and international affairs, then revolutionary changes in how we educate our future leaders may also be in order. In this section, the current academic program at the Academy is briefly reviewed. Then an alternative approach is offered that is based on the model for the undergraduate education of future strategic leaders, which was developed in the previous section.

THE CURRENT ACADEMIC PROGRAM

The purpose of the academic program at the United States Military Academy (USMA) is to provide cadets an intellectual foundation for service as commissioned officers who can "anticipate and respond effectively to the uncertainties of a changing technological, social, political, and economic world."[26] To meet this broad purpose, the Academy presently has identified the following nine academic program goals, which are to guide the development of the structure and content of the curriculum:[27]

- Understand and apply the mathematical, physical and computer sciences to reason scientifically, to solve quantitative problems, and use technology.
- Use the engineering thought process by which mathematical and scientific facts and principles are applied to serve the needs of society.
- Draw on an appreciation of history to understand in a global context human behavior, achievement, and ideas.
- Understand patterns of human behavior, particularly how individuals, organizations, and societies pursue social, political, and economics goals.
- Draw on an appreciation of culture to understand in a global context human behavior, achievement, and ideas.
- Recognize moral issues and apply ethical considerations in decision-making.
- Communicate, especially in writing, in precise language, correct sentences, and concise, coherent paragraphs—each communication evincing clear, critical thinking.
- Think and act creatively.
- Demonstrate the capability for and willingness to pursue progressive and continued educational development.

Relatively minor adjustments to the program goals are presently being developed that will result in the introduction of a separate information technology goal and concomitant redefinition of the math-and-science goal and of the engineering goal.[28] Not surprisingly, "ownership" of each of the goals is claimed by various combinations of the thirteen academic departments (Behavioral Sciences & Leadership, Chemistry, Civil & Mechanical Engineering, Electrical Engineering & Computer Sciences, English, Foreign Languages, Geography & Environmental Engineering, History, Law, Mathematical Sciences, Physics, Social Sciences, and Systems Engineering) that implement the academic program.

To support the academic program goals, USMA has developed a broad curriculum built around a set of common (core) courses. Approximately three-quarters of the cadets' academic program consists of a 31 core courses that span mathematics, philosophy, literature, composition, foreign language, physics, chemistry, physical geography, computer science, history, psychology, leadership, law, military art, and engineering. The balance of a cadet's academic work (9-13 electives) is devoted to specialization in a discipline of the cadet's choice. The normal academic load for a cadet is five courses per semester.

A recent assessment of the teaching of national security at West Point argues that the breadth of the core curriculum is essential to preparing cadets to face broadly defined security issues, such as environmental problems, economic growth, domestic crime, and social justice, as well as the use of force to secure, defend, and promote national interests.[29] The same paper identifies the following three semester-long courses within the core curriculum, which bear directly upon national security: American Politics, Economics, and International Relations.[30] Arguably, this description of the core education in national security affairs serves as an articulation of how USMA currently provides cadets an intellectual foundation for future strategic leadership.

Through completion of the core curriculum, graduates of the Academy receive a much broader education than is provided by most civilian universities. However, the effectiveness of the implementation of the academic program at USMA is hampered by a critical flaw—a lack of focus that has led to a rather superficial coverage of a wide range of topics at the expense of depth of understanding. Cadets are bombarded with a torrent of introductory-level courses. For the most part, the academic departments independently pursue the academic goals with which they identify, leaving many cadets with the feeling that education is a matter of meeting a series of disjointed requirements. Furthermore, the limited time spent on each subject provides an insufficient basis for the development of competence in critical thinking. In recognition of this predicament, the Academy's leadership has recently taken steps to increase the coordination of

the Academic program and to interject more higher-order thinking into the cadet's educational experience. For each academic program goal, a "goal team" consisting of senior faculty members has been formed to assess the level of success in accomplishing the goal and to promote coordination between departments. Departments have also been directed to "turn down the volume" in courses to allow cadets the time to think. Unfortunately, these initiatives have only produced marginal effects. The actual crux of the problem is structural in nature and cannot be adequately addressed by exhorting departments to cooperate or by "fixing" individual courses. The problem of lack of focus results from a lack of prioritization of the academic program goals that drive the curriculum; for all practical purposes, the nine (soon to be ten) program goals have been afforded equal status. This is perhaps to be expected because the purpose of the academic program is itself so broad that a rational basis for prioritization of the goals cannot be had.

A DIFFERENT APPROACH

The stated purpose of the academic program should ultimately define the structure of the curriculum. Suppose that the purpose of USMA's academic program is changed to the following: *to provide cadets an intellectual foundation for their development as future strategic leaders*. How might the education at the Academy differ from that which is offered now? The model for undergraduate education for future strategic leaders (developed earlier in this paper) will be employed to address this question. Although it might be tempting to try to lay out a complete slate of courses for the revised curriculum, this complicated task is well beyond the scope of this paper. Rather, the focus here will be on the academic program goals that would drive development of such a curriculum.

The following six academic program goals would serve to meet the revised purpose:

- Understand the philosophical underpinning of American society.
- Understand how the American political system functions.
- Understand the nature of scientific revolutions and how they affect society.
- Understand the impact of the information age upon human psychology.
- Understand how globalization affects the strategic environment.
- Understand how democratization affects the strategic environment.

The first two objectives relate to fundamental leadership competencies—development of a frame of reference and of political expertise—while the balance of the objectives are attuned to an emerging strategic environment that is characterized by the revolutions in military and international affairs. The rationale behind the inclusion of these goals is implicit in the model

developed earlier in this paper. However, several other observations are in order. First, by and large, these objectives are not neatly aligned with traditional academic disciplines, but rather cut across a number of diverse disciplines. Second, these goals are more narrowly defined than the existing goals and as such should allow for the design of a more coherent educational experience for the cadets. Finally, the objectives are not of equal priority, nor is it anticipated that equal academic time would be allocated to each. The most important is understanding the philosophical foundation of American society, since this forms the basis of a mental frame of reference for interpreting subsequent studies and experiences. Next in importance is the understanding of globalization, since globalization crosses so many disciplines and is arguably the dominant feature of the strategic environment.

Pedagogical practices are as important as course content for achieving academic goals. Critical thinking should be promoted in all courses, but this can only be effective if a well-articulated model for critical thinking is consistently employed throughout the curriculum. Where possible—and this could include most courses—the "Great Book" method should be employed, since it is ideally suited for developing critical thinkers. Finally, oral and written communications, ethical behavior, and creativity are functions that must be carefully integrated into the entire curriculum.

How might such a curriculum appear? Figure 1 illustrates a possible allocation of academic time that supports the academic program goals as they were prioritized above. Effective course load per semester falls from five to three. This is not meant to imply a decrease in emphasis on academics; the level of effort exerted by the cadets should remain the same, or may even increase, while the quality of the time spent on academics should improve. Cadets will have more time to engage in deep thinking and to complete outside reading that is

<table>
<tr><th>Year 1</th><th>Year 2</th><th>Year 3</th><th>Year 4</th></tr>
<tr><td colspan="4">----------Philosophy----------</td></tr>
<tr><td colspan="3">----------Globalization----------</td><td></td></tr>
<tr><td colspan="2">----------Science----------</td><td>-----Info. Age-----</td><td>--Amer. Politics--</td></tr>
</table>

FIGURE 1. CURRICULUM STRUCTURE FOR THE PROPOSED ACADEMIC GOALS

the centerpiece of the Great Books method. No effort has been made to explain specific courses within the time provided for each goal (again, this is beyond the scope of this paper). In practice, detailed curriculum development would be accomplished by the academic department—or departments—assigned to oversee each goal. Arguably, the most efficient way to organize the faculty to execute this curriculum would be to form a single department for each goal, thus reducing the number of academic departments from 13 to 6. Of course, these departments would necessarily be multidisciplinary in nature.

The proposed curricular structure possesses several desirable attributes when compared to the present curriculum at USMA. It is focused on well-defined program goals. It trades breadth for depth. It should allow cadets the time to reflect upon their work and develop critical thinking skills. However, realization of such a program at West Point would be extremely difficult to achieve. In the first place, institutional resistance to the change would be intense. Not only would one have to convince the administration and the faculty (and the "old grads") of the merits of the program, but the almost certain need to reorganize the current system of academic departments would probably result in intense "turf wars" or an attempt on behalf of the existing departments to collectively maintain the status quo. Even if these obstacles could be overcome, the adoption of a curriculum that emphasizes depth, formal development of critical thinking, and a seminar approach that is central to the Great Books method, would require a much more academically experienced faculty than the one presently at the Academy, which consists primarily of junior officers who report to USMA immediately after completing a master's program after having spend seven-to-ten years serving in the field army. Since these officers also play a critical role in the military development of the cadets, simply replacing them with more seasoned civilian or military faculty is probably not an acceptable solution. Rather, USMA would have to commit to a rigorous faculty development program both to increase teaching skills and to elevate the knowledge base of the faculty.

The above-mentioned challenges associated with transforming to a markedly different academic program at West Point—though daunting—are not insurmountable. One does not have to look far in the world of business or in the government to see examples of large organizations effectively managing change. It goes without saying that committed and skillful leadership at the senior level is an absolute prerequisite to success. In this particular case, the key is to marshal support for the redefined academic purpose, i.e., that the function academics at the academy is "to provide cadets an intellectual foundation for their development as future strategic leaders." Once this idea is accepted, the necessity for making change would become

apparent throughout the organization, and this would greatly facilitate overcoming remaining resistance to implementation of the new program.

CONCLUSION

The assumption upon which this paper rests is that the overall development of a strategic leader begins with education at the undergraduate level. Given this assumption, an answer to the following question has been sought: What constitutes an ideal undergraduate education for the aspiring strategic leader? A systematic approach was taken to answer the question. As a starting point, a widely accepted model of strategic leadership was examined to ascertain the competencies necessary for one to create and implement a strategic vision, which is the capability that distinguishes strategic leadership. Also considered were the ongoing revolutions in military and international affairs, which are defining the strategic environment. The conclusion was that the undergraduate education of prospective strategic leaders should primarily focus on development of a mental frame of reference that will allow students to place their future studies and experiences into perspective.

If the purpose of the academic program at the United States Military Academy were redefined to be "to provide cadets an intellectual foundation for their development as future strategic leaders," then—as argued in this paper—the present curriculum at West Point would require significant modification. The proposed change is revolutionary and would likely be met with fierce resistance for a variety of reasons. However, it is plain to see that the Army is transforming to meet the challenges of the 21st Century. The question is: Should the way that we are educating officers change, too?

WORD COUNT = 7867

ENDNOTES

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[3]Richard A. Chilcoat, Strategic Art: The New Discipline for 21st Century Leaders (Carlisle, PA: United States Army War College, 1995), 7-9.

[4]Edward Luttwak, Grand Strategy of the Roman Empire (Baltimore, MD: Johns Hopkins University Press, 1976), 137.

[5]Magee, 19-28.

[6]Ibid., 37.

[7]Ibid., 37-40.

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[28]Colonel Kip P. Nygren, Chairman of the Math, Science and Engineering Committee at the United States Military Academy, "Guidance for Academic Program Goal and Curriculum Revisions," memorandum for Math & Science, Engineering & Technology, and Information Technology Goal Teams, West Point, NY, 7 Dec 00.

[29]Daniel J. Kaufman and Jay M. Parker, "Teaching National Security at West Point: More than Just One Course," National Security Studies Quarterly III, no. 4 (Autumn 1997): 31-32.

[30]Ibid., 32-33.

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