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Recommended Citation

Steven Metz Dr., *Strategic Horizons: The Military Implications of Alternative Futures* (US Army War College Press, 1997),
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**STRATEGIC HORIZONS:
THE MILITARY IMPLICATIONS OF ALTERNATIVE FUTURES**

Steven Metz

March 7, 1997

The views expressed in this report are those of the author and do not necessarily reflect the official policy or position of the Department of the Army, the Department of Defense, or the U.S. Government. This report is approved for public release; distribution is unlimited. The author would like to thank Dr. Douglas V. Johnson, Dr. William T. Johnsen, Professor Douglas Lovelace, and Dr. Gary L. Guertner for insightful comments on earlier drafts of this report.

Comments pertaining to this report are invited and should be forwarded to: Director, Strategic Studies Institute, U.S. Army War College, Carlisle Barracks, PA 17013-5244. Comments also may be conveyed directly to the author by calling (717) 245-3822, FAX (717) 245-3820, or by email at metzs@carlisle-emh2.army.mil. Copies of this report may be obtained from the Publications and Production Office by calling commercial (717) 245-4133, DSN 242-4133, FAX (717) 245-3820, or via the Internet at rummelr@carlisle-emh2.army.mil

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FOREWORD

A year ago the Chief of Staff of the Army initiated the Army After Next Project (AANP) as a means of stimulating constructive thinking about the Army's future throughout the service. AANP has quickly developed into a primary vehicle for long-range planning. Under the leadership of the Training and Doctrine Command (TRADOC), the AANP has conducted an ambitious program of studies, symposia and workshops, culminating in a Winter War Game and Senior Seminar held at Carlisle, January 27-February 6, 1997.

In addition to supporting TRADOC's AANP through the world class simulation and gaming facilities of the Center for Strategic Leadership, the Army War College has begun a complementary research project, combining the talents of faculty and students. A key line of initial inquiry for us has been to forecast the nature of the future security environment in which the Army will operate.

That is the task Dr. Steven Metz set for himself in this monograph. In the pages that follow he propounds "currents of change" that will determine the future and sketches a series of plausible future security systems. Each system is characterized by the forms of conflict that will dominate it, the major strategic issues the United States might face, and the resulting military implications. While Dr. Metz's analysis leads to observations certain to be controversial, he illustrates quite clearly the primacy that environmental context will have in shaping our national security outlook and military strategy. Thus, Dr. Metz's observations on trends and systems warrant careful consideration as national policymakers and the Army's leaders build the military force of the future.

The Strategic Studies Institute is pleased to offer this study as the fourth in its series of Army After Next publications.

RICHARD H. WITHERSPOON
Colonel, U.S. Army
Director, Strategic Studies Institute

BIOGRAPHICAL SKETCH OF THE AUTHOR

STEVEN METZ is the Henry R. Stimson Professor of Military Studies at the U.S. Army War College. He has been a research professor at the War College's Strategic Studies Institute (SSI) since 1993. Before that, he taught at the Air War College, the U.S. Army Command and General Staff College, and several universities. He holds a B.A. and M.A. in international studies from the University of South Carolina, and a Ph.D. in political science from the Johns Hopkins University. Dr. Metz has co-authored a number of SSI studies dealing with the future security environment including *The Future of American Landpower*, *The Principles of War in the 21st Century*, and *Strategy and the Revolution in Military Affairs* and written on this topic for *Parameters*, *Special Warfare*, *Current History*, and *Military Review*. Dr. Metz has also spoken widely on future warfare and been interviewed by media in the United States and around the world.

SUMMARY

It is important to analyze long-term changes in the global security environment in order to begin preparation for the post-Force XXI U.S. Army. Existing currents of change suggest a number of feasible yet very different future security environments as defined by the primary source and form of violence conflict. Each would require a different type of U.S. Army.

Part I: Currents of Change. The most important *overarching* currents of change which will shape the future security environment include:

- "Interconnectedness" which is the increasing electronic and physical linking of individuals, groups, commercial entities, and organizations of all sorts;
- The compression of time; and,
- "Demassification" which is the replacement of very large commercial and political entities with smaller, more flexible ones.

In the realm of *technology*, the information revolution will continue and blend with ongoing changes in engineering to allow a range of "brilliant" machines and various types of nanotechnology. Eventually the information revolution will meld with a nascent biological revolution growing from genetic engineering.

For the future security environment, the most important *economic* currents of change are:

- The continued transnationalization of corporations and markets;
- The emergence and consolidation of post-industrial, knowledge-based economies;
- The geographic shift of industry;
- The transformation of corporations from hierarchies to networks; and,
- The outright collapse of formal economies in parts of the world.

Important *political* currents of change include:

- The devolution of power from sovereign nation-states;
- Changes in the nature of security; and,
- A decline in the legitimacy of states.

The most salient *social and demographic* currents of change are:

- Continued population growth and urbanization;
- Continue escalation of crime; and,
- The emergence of economically superfluous segments of state populations.

The *ethical and psychological* currents shaping the future security environment include:

- An intensified search for new frameworks of personal identity; and,
- Increased resistance to rapid and radical change.

The most important *military* currents of change are:

- Increased heterogeneity among global armed forces; and,
- A redefinition of civil-military relations.

Part II: Alternative Futures. There are five forms that the security environment of the year 2030 and beyond might take. Each would require a radically different U.S. military.

A *state-based, balance-of-power system* is one in which sovereign nation-states seek their national interests, sometimes using traditional forms of military force. State-on-state war remains the most significant form of armed conflict. In such a system, shifting coalitions maintain the balance and serve as counterweights to powerful states. As the most powerful state, the United States is likely to see coalitions designed to constrain it. For the U.S. military, warfighting would remain the primary mission. Both unilateral and coalition capabilities would be necessary. The United States could face a peer competitor, but this would more likely be a coalition rather than a single state. Many other opponents would use asymmetric counters to American military strength.

A *trisected global security system* is the most likely one. In this, the world would be divided into three tiers. The First Tier would be composed of advanced, stable regions and states

with information-based economies. There would be significant political, economic, cultural, and military integration within the First Tier. First Tier states would not wage traditional war against each other. The Second Tier would consist of a range of diverse and autonomous nation-states, most with industrial-based economies. These states would retain traditional military forces, and would occasionally wage war on each other. Most Second Tier states would acquire weapons of mass destruction. The Third Tier would be characterized by endemic violence, ungovernability, and a range of ecological problems. Armed forces would take the form of militias, warlord armies, and terrorist gangs. Third Tier states would not have the capability to wage sustained, large-scale warfare. The U.S. military would need very different capabilities in each tier, so the grand strategy framed by American policymakers would determine the shape of the armed forces. While the U.S. military would use traditional force against Second and Third Tier enemies, it would seldom if ever wage sustained campaigns.

An ideology-based system is one in which conflict arises from the reemergence of transnational ideologies and mass belief systems. Most conflict would occur along the fault lines between ideological blocs, and the use of force would be only partially contained by normative restraints. This means that wars can easily escalate, even to the point of full-scale world war between hostile ideological blocs. The U.S. military would be larger and more robust in an ideology-based system than in the other feasible alternatives. Power projection and support to allies would remain key components.

In a security system characterized by *internal collapse*, internal violence rather than state-on-state war poses the greatest problems. Many weak states will fragment or collapse, and even strong, developed states will face internal violence, often provoking draconian responses. The U.S. military will not be configured for conventional warfighting, but will focus on the sorts of functions handled today by Special Forces, such as raids and support to allies.

Finally, a system dominated by *economic warfare* would see the intense, sometimes violent struggle for resources and markets cause armed conflict. Transnational entities would develop their own security interests separate from states. Intelligence gathering and security would undergo privatization, with powerful transnational security firms performing functions that state militaries cannot or will not. In the use of force, though, there would be pressure to minimize collateral damage and civilian casualties. In such a system, the U.S. military would need only a very limited capacity for traditional warfighting and would, instead, focus on information warfare. Nonlethal weapons of all kinds would be particularly significant.

Conclusions. It is not yet clear which of the alternative future security systems will actually come to pass. In any of them, though, factors such as non-state enemies and weapons of mass destruction are likely to be important. At this point, all the U.S. military can do is continue to debate and analyze the implications of each so that it is prepared once the future system does begin to take shape.

**STRATEGIC HORIZONS:
THE MILITARY IMPLICATIONS OF ALTERNATIVE FUTURES**

Introduction.

As a new millennium approaches, the world is poised at the confluence of two great forces. One is the revolutionary transformation of the global security environment as the Cold War system transmutes into something else. The second is a compression of time, a quickening of the pace of change so extreme that it, too, must be considered revolutionary. Of all the effects these two forces will have, one is particularly relevant for political leaders, national security professionals, and military planners: strategy, with its drive to synchronize diverse efforts and shape the long-term future, will be more significant than ever before in human history.

Yet, however important it is for those shaping national security to peer into the future, this is never easy. Futurism is a complex endeavor demanding creativity, imagination, and a willingness to take intellectual risks. At the same time, it is vital. Because changing or adapting a military takes so long and because the price of failing to do so in the right way and at the right time is so high, security professionals and military planners absolutely must grapple with the long-term future. To do so demands a rigorous methodology built on heuristic devices. One useful approach, pioneered by Charles W. Taylor and others, stresses *trends*. The futurist selects relevant strategic trends, projects the consequences, outcomes, interactions, and probabilities of these trends and derives plausible alternatives from them.¹ During this process, the strategic futurist must remain sensitive to subtle, indirect, and often unexpected relationships both outside and inside the realm of national security. This methodology can be used to generate an array of alternative future security systems, each distinguished primarily by the source and form of armed conflict.²

For the U.S. Army, such analysis is well worth the effort. Since a land force configured to deal with one sort of future security system might be ineffective in another, construction of the Army that will take shape after Force XXI is fielded depends heavily on futurism. By exploring the implications of alternative future security environments now, the Army can offer the best possible advice to civilian decisionmakers plotting the nation's future, provide usable estimates of the military force structures and risks associated with a variety of alternative future security systems, and lay the foundation for rapid institutional adaptation as the contours of the future security system become clearer. Even though the precise form of the future security environment cannot be predicted with certainty, feasible

alternatives and guideposts can and should be developed now. This study is intended to lay a foundation for such thinking.

PART I: CURRENTS OF CHANGE

Overarching Currents.

In a time of intense and far-reaching change, the metaphoric term "currents" may best capture the force of change driving nearly all aspects of human life. Currents of change are like oceanic ones. Not all are of equal power and importance as they swirl and intermix. Some fade for a while, only to reemerge far away. And, just as there are warm and cold oceanic currents, currents of change can be positive, negative, or a combination of the two. The relationships between currents of change are exceedingly complex, but to make sound judgements about the future requires understanding them.

Three overarching currents are particularly important in shaping the future security environment. The first is what can be called "interconnectedness"--the increasing electronic and physical linking of individuals, groups, commercial entities, and organizations of all sorts.³ In coming decades, this will probably accelerate as cultures converge and sometimes merge while a wide range of communities develop tighter economic and political links. Interconnectedness reflects the tremendous improvements made in the technology of communications and transportation as well as equally vast increases in the affordability of the long-distance transfer of information and the movement of people and goods. At its extreme, interconnectedness leads to economic interdependence, political unity, and cultural homogenization. Even when it does not go this far, interconnectedness already affects nearly all aspects of life in most societies and is likely to do so to an even greater extent in the future.

A second overarching current is the compression of time. In the economic, political, and social realms, the decision-action cycle--the collection and assessment of information, analysis, decisionmaking, the implementation of decision outcomes, and adjustment--is accelerating. As a result, the life span of ideas, concepts, procedures, and organizations is declining. For success in nearly any endeavor, creativity and innovation must be continuous rather than episodic. This will play a major role in shaping the future security environment, in part because it brings immense, sometimes unbearable pressure on governments. As Alvin Toffler writes, "The acceleration of change has overpowered the decisional capacity of our institutions, making today's political structures obsolete, regardless of party ideology or leadership."⁴

A third overarching current is "demassification."⁵ It represents a reversal of the centuries-long trend toward the concentration of production and power which led to things like the "mass media," gave larger industries and corporations a competitive advantage over smaller ones, and gave large political entities an advantage over smaller ones. Today, technology and human factors are leading toward fragmentation of industrial megaliths and allowing "niche" companies and organizations to compete with and sometimes surpass larger ones. The same phenomenon may soon appear in the realm of politics. At the same time, personal identity is demassifying as mass, "one size fits all" belief systems no longer seem to meet the psychological needs of modern citizens with access to electronic media and computer-based networked communications. For the first time in history, individuals have the power to create, craft, and customize a belief system rather than being forced to adapt to existing ones. The implications of this are immense and include things like the erosion of the power of leadership in societies where individualized belief systems become the norm. Taken to its ultimate, this might cause humans to totally redefine the meaning of basic social units like community and society.

Technological Currents.

Within the parameters of these macro-level currents, a number of other changes are likely to shape the future security environment. Some of the most important are technological. Large parts of the world are in the midst of what appears to be permanent and intense technological change as new machines, new systems and, more importantly, new uses for new machines appear at a breathtaking pace. Technology can augment both political stability and instability. On the positive side, nonlethal weapons can limit the blood cost of conflict resolution and provide governments innovative ways to meet citizen needs and demands.⁶ On the negative side, technology can create new vulnerabilities by allowing attacks on national and transnational information systems.⁷ Technology also allows organizations and individuals using violence to communicate and cooperate, and can amplify discontent. Technological change can also shape the global security system by exacerbating the difference between "haves" and "have nots," whether individuals or states. This can generate resentment, hostility and, potentially, conflict as technology serves as a visible reminder of stratification and unsettling psycho-social change. In the early 19th century, England was swept by a violent movement known as the "Luddites." These handicraftsmen sought, among other things, to destroy the textile machinery that was replacing them. Today, rapid change is already spawning neo-Luddites, like the "Unabomber," who see technology as dangerous or a challenge to human dignity or

quality of life and who are increasingly willing to use violence to oppose the change associated with technology. While the Unabomber's claim to represent an organized movement appears to be pure fantasy, the rise of such a movement is certainly possible and may even be likely.

In the past, new technology tended to emerge at a pace which allowed the maturation of the technology itself and for social, political, economic, and ethical adaptation to it. Today, the compression of time and the quantum increase in global communication mean that technology is often superseded even before it matures or society fully adapts to it. For instance, today electronic information technology built around the silicon microchip plays a large role in driving social, political, economic, and ethical change. It is becoming a major source of wealth and power, a means of stratification both within and between societies, and, increasingly, a seamless part of social, economic, and political life rather than a "stand alone" mechanism used only by specialists. This is a sign of the ongoing social maturation of information technology. But even though the end of the information revolution is not yet in sight, it is already possible to speculate on what will supersede it. First will come a blending of the information revolution with ongoing changes in engineering and manufacturing leading to dramatically improved robotics, "brilliant" machines capable of complex decisionmaking, and nanotechnology in which the ability to manipulate and manufacture individual molecules allows the construction of tiny but complex machines. Eventually this may fuse with a concomitant biological revolution arising from the science of genetic engineering leading to manufactured entities that are part machine, part living organism. Cyborgs--once relegated to science fiction--are now conceivable. A biotechnological revolution of this form will have immense political, social, and ethical implications and could dramatically shake the foundation of human beliefs and perceptions.

Given the complexity, expense, and massive potential of the machines that might emerge from a fusion of the information, mechanical, and biological revolutions, it is possible that one of the great political issues of the latter half of the 21st century will pit those who oppose the construction of such machines on moral grounds against those who advocate them. The result may be violent conflict. The fusion of the information, mechanical, and biological revolutions will eventually change the way military power is applied as well. Close engagements involving human soldiers may become a historic anachronism superseded by combat between robots or cyborgs. Such a situation will, of course, only come to pass after the careers and even the lives of today's political and military decisionmakers. But, it is equally true that directions set by contemporary

decisionmakers, especially those concerning the human dimensions of technology, its social functions, and ethical constraints, will shape the future.

Economic Currents.

Many futurists subscribe to Karl Marx's notion that economics drive all other currents of change. While this may be an oversimplification, the central role of economics must not be underestimated. For those concerned with national security, the most important economic currents are: (1) the continued transnationalization of corporations and markets; (2) the emergence and consolidation of post-industrial, knowledge-based economies (or, at least, economies built on information sectors); (3) the shift of industry to new geographic regions, particularly the Pacific rim; (4) corporate restructuring from hierarchies to networks; (5) demassification and the emergence of niche markets and firms; and, (6) the outright collapse of formal economies in some parts of the world.

In the coming decades, the ability of governments to control commercial firms or use the economic element of national power will continue to erode. When governments attempt to use or tightly control commercial firms, businesses will simply move elsewhere. The near future may even see a reemergence of the struggle for power between states and commercial organizations that subsided during the past hundred years as states gained the advantage. Economic changes also have a "bottom up" effect on the global security environment. A large proportion of the world's population is attempting to adapt to economic change or economic-driven social change. In any social, political, or economic shift of revolutionary proportions, there are losers who resist the process. Given this, those unable to adapt to the economic changes taking place or in danger of being left behind may resist violently. In the regions of the world where formal economies collapse, states themselves will disintegrate or become impotent, thus spawning endemic violence. This is already underway in much of Sub-Saharan Africa including Somalia, parts of Zaire, Liberia, and Sierra Leone, as well as parts of Asia such as Afghanistan. It may spread in coming decades.

Political Currents.

At least three political currents are likely to shape the future security environment. One is the devolution of power from sovereign nation-states. Even though there is a resurgence of nationalism in the former Soviet bloc, the ability of the sovereign nation-state to adequately meet the needs of its citizens is eroding. As Jessica T. Mathews puts it, "The steady concentration of power in the hands of states that began in 1648

with the Peace of Westphalia is over, at least for a while."⁸ In the 20th century, the first great blow to the sovereign nation-state came from the two world wars. Sovereignty implied the right to go to war in pursuit of national interests when a minimal set of conditions was fulfilled. The horror of the world wars showed that technology and industrialization made this notion too expensive, at least for the world's most powerful states. World War II and, in particular, the Holocaust, further eroded sovereignty by giving birth to the idea that actions defined as breaches of human rights by the world community, even if acceptable under the laws of a sovereign state (e.g., *apartheid* in white-ruled South Africa and Saddam Hussein's treatment of Iraq's Kurdish and Shi'ite minorities), pose a threat to international peace and stability and thus justify outside intervention. As increased interstate trade and the rise of multinational corporations led to the internationalization of the global economy, the sovereign nation-state suffered another blow as its ability to control its own economic well-being declined. As a result, the utility of the economic element of national power declined.

The devolution of power from sovereign nation-states will probably continue in coming decades. In part, this is due to cultural convergence, particularly among global elites linked by information technology and the entertainment industry. Signs of this include the globalization of Western and particularly American popular culture, and the spread of liberal democracy. If anything, information technology will accelerate this process as the Internet becomes more economically, politically, and culturally important. Through "chat rooms" and virtual conferencing, the Internet facilitates the growth of transnational electronic societies and the spread of the English language. Admittedly, cultural convergence among the world's technological, political, and economic elites will not automatically lead to the demise of the sovereign nation-states. Western Europe, the Arab world, and many other state systems have seen periods where elites shared a transnational culture (often based on religion) while independent states remained preeminent. Cultural convergence among global elites will, however, affect the security environment in yet unknown ways and might, in combination with other factors, pave the way for the obsolescence of the sovereign national state.

The changing nature of security or, more accurately, changes in the nature of threats to personal security also encourage the devolution of power from nation-states. As Martin van Creveld has pointed out, the modern nation-state arose in large part because it was the most effective unit for making war on other sovereign nation-states.⁹ Sovereign nation-states have not yet proven that they are equally adept at dealing with new threats to personal security, especially transnational, sub-state criminal cartels in

coalition with a range of indigenous social castoffs. If what Jessica Mathews calls "a growing sense that the individuals' security may not in fact reliably derive from their nation's security" continues, the nation-states will have taken another step toward obsolescence.¹⁰ Some states are already exploring the privatization of intelligence, which is a key component of security.¹¹ If nation-states also begin to privatize the military component of security, it will be their death-knell. Many state governments, though, will not "go gentle into that good night" of obsolescence and will resist the loss of power. The result will be conflict and violence.

The demassification of security may spill over into other areas as well. The information revolution already provides local communities the opportunity to assume many of the infrastructure, development, and welfare functions previously performed by national governments. To date, there is no political incentive or will to shift economic and military power from central governments to local ones, but this could change. If national governments continue to lose functions, they will soon lose power. At the same time, sovereign nation-states are unable to deal with many transnational problems, especially those concerning the ecology and health. The shift in these areas is toward empowerment of transnational entities. Again, as transnational entities assume greater responsibility, they will eventually develop their own financial base and further the assault on the sovereign nation-state from both above and below.

The modern nation-state became the dominant political organization because it was effective at providing order, stability, and social identity. Unlike the world's principalities, city-states, sultanates, sheikdoms, chieftaincies, and other small political units, the nation-state was large enough to defend itself but not so large as to be culturally meaningless or conflictive like multiethnic empires. To a large extent, the original *raison d'etre* of the sovereign nation-state was to make war. Initially most war was waged against internal forces--usually landed nobility or minority groups--resisting the centralization of power in the hands of the nation-state. As nation-states consolidated and centralized internal authority, interstate warmaking became the "core competency" of the sovereign nation-state. What gave the sovereign nation-state its amazing longevity was its combination of cultural coherence (at least those states with a dominant culture) and its ability to assume new tasks. The latter is particularly important.

Over the centuries, the state went from being solely a provider of order and stability to the source of a vast range of services such as infrastructure construction, health, education, environmental protection, and support to the arts. Today, the sovereign nation-state may have overstepped its capabilities and

assumed so many tasks that it is in danger of losing its coherence and even its legitimacy. Individuals consider the state responsible for jobs, health care, and old age pensions that previously were the purview of the family. Today even effective nation-states are hard pressed to meet the demands placed on them. As people increasingly turn to other sources for resources like security and health care, the power and legitimacy of the nation-state will erode further. As Jessica T. Mathews writes:

Nation-states may simply no longer be the natural problem-solving unit. Local government addresses citizens' growing desire for a role in decision-making, while transnational, regional, and even global entities better fit the dimensions of trends in economics, resources, and security.¹²

Skepticism concerning the effectiveness of the state and of political leaders is being exacerbated by other factors as well. One is the spread of the American variant of liberalism. The American political culture has always combined a grudging and utilitarian respect for political authority with a healthy distrust of politicians and the political style of decisionmaking. When American liberalism is transplanted to other cultures, this distrust often spawns debilitating pessimism and anomie. Extensive state involvement in the management of the economy--a characteristic of the 20th century--opens opportunity for corruption by political leaders. When this occurs, legitimacy is further weakened. In addition, technology developed by the entertainment industry may inadvertently erode political legitimacy and authority by blurring the distinction between illusion and reality. Generations growing up around the world are so accustomed to special effects that they increasingly question much of what they see or hear. The refinement of virtual reality, morphing (the creation and manipulation of realistic electronic images of someone), and holograms will add to this blurring of illusion and reality. Since trust is the foundation of political legitimacy, this pervasive skepticism, mistrust, and disbelief are likely to add to the disintegration of political authority.

Social and Demographic Currents.

Of the ongoing social and demographic currents, population growth and urbanization are likely to have the greatest impact on the security environment. While population has leveled off in the developed world, policies designed to stem population growth will not take effect in the developing world for at least 30 years.¹³ According to most demographic predictions, world population will eventually stabilize between 10 and 11 billion (about twice the current population).¹⁴ Population growth alone does not automatically hinder economic growth or cause poverty.¹⁵ There is,

however, a complex relationship among population growth, environmental decay, particularly in developing areas unable or unwilling to implement sound ecological practices, and migration, whether to urban areas within developing countries or to developed countries.¹⁶ Population pressure can accelerate environmental decay and, under some circumstances, spark or exacerbate conflict.¹⁷ The relationship between population growth and conflict is thus indirect, but nonetheless important. As Robert Kaplan puts it, "Demographic pressures never reveal themselves as such: People don't demonstrate in the streets or attack others because they believe their region is overcrowded. The crush of humanity invites scarcity, whether in food, water, housing, or jobs. Scarcity fuels discontent . . ."¹⁸

Urbanization is also changing the global security environment. The United Nations believes that by 2005, half of the world's population will live in cities.¹⁹ The trend toward urbanization will be most intense in the developing world. According to some estimates, Africa will have gone from 14.5 percent urban in 1950 to 53.9 percent in 2010, South America from 43.2 percent to 90 percent over the same period, and Asia from 16.4 percent to 50.1 percent.²⁰ The population of megalopoli like Mexico City and Sao Paulo will be well over 20 million by the end of the 20th century and, according to U.N. projections, there will be 24 urban agglomerations with more than 10 million inhabitants.²¹ Places like contemporary Kinshasa, Zaire, where there is a total collapse of government authority and infrastructure in the slum regions, may portend the future of many urban areas.²² As with population growth, there is no direct, linear relationship between urbanization and violence, but when urbanization is combined with other factors like the declining legitimacy and effectiveness of the state and economic problems, the result is incendiary. Given this, Ralph Peters is probably correct when he writes, "The future of warfare lies in the streets, sewers, high-rise buildings, industrial parks, and the sprawl of houses, shacks, and shelters that form the broken cities of our world."²³

In most of the world, crime has replaced state-on-state war or organized political insurgency as the preeminent security threat. In large cities and Third World areas where states have collapsed or failed, violence has become omnipresent, a normal part of daily life rather than an aberration. Nothing suggests that this will be reversed in the near future. Technology and the overall drive for efficiency in business is increasing the number of "economically surplus" people. Where a century ago it took the labor of nearly the entire population of a state to produce the various goods needed to sustain a society, the world is moving toward a time when high rates of production will require the labor of only a small group (whether physical or mental labor). The social and ethical issues arising from this will pose great

challenges in the 21st century. The traditional notion that links self-esteem and status to employment and productivity--what sociologist Max Weber called the "Protestant ethic"--may become obsolete. Such tectonic shifts in attitudes and social structures are always dangerous.

Initially, the economic superfluity of large segments of the population will lead to pervasive un- and under- employment along with the boredom and low self-esteem which breed of crime and violence. Global intercon- nectedness, whether electronic or physical as migration becomes easier and more frequent, will allow transnational criminal syndicates to coalesce, form alliances, and, sometimes, go to war with each other to the detriment of bystanders. In many cases, the response will be a militarization or re-militarization of state and society as citizens lose confidence in the ability of civilian regimes to preserve law and order and turn to armed forces--whether state militaries or private ones--to "save" society. Eventually, it may require a new ethic that accords status on some basis other than formal employment to regain social stability.

Ethical and Psychological Currents.

Changes in values and attitudes are particularly difficult to predict yet will be important determinants of where, when, and how armed force is used in the future security environment. Two ethical and psychological currents of change appear particularly significant. One is the worldwide quest for personal identity and social meaning in the face of wide-ranging and rapid change. In the Third World, traditional systems of identity and meaning are in their death throes as urbanization increasingly leaves rural villages--the historic structure for identity and meaning--depopulated or inhabited only by the very young and the very old, or marginalizes their role in shaping social life. The sprawling cities seldom provide an effective alternative structure of meaning and identity. The outcome is the immense attraction of ideologies such as the various forms of what is often called Islamic fundamentalism or, in other places, virulent and nativistic ethnic or tribal nationalism. Today this is particularly intense in the former Soviet bloc where no system of personal meaning other than personal aggrandizement has filled the psychic vacuum left by the implosion of Marxism-Leninism. Even if ethnicity declines as a framework for identity in the former Soviet bloc or regions such as Sub-Saharan Africa, the Middle East, and South Asia, something similar will replace it since the quest for a framework of identity and meaning is intrinsic to humans.

The developed world has so far suffered less from lack of effective structures for personal meaning and identity, but the

foundation exists. Japan, the United States, and many Western European states have seen the rise of violent, millinerian religious cults, racist organizations, right-wing militias, and, in the United States in particular, conspiracy- theory groups claiming everything from a program of government mind control to collaboration between the U.S. Government and space aliens.²⁴ There have always been frustrated, potentially violent fringe groups in modern societies but now electronic communications allows them to exchange ideas, reinforce each other, and, sometimes accrete into loose coalitions unified by shared hate or paranoia. "Today," writes Bruce Hoffman, "the means and methods of terrorism are readily available at bookstores, from mail-order publishers, on CD-ROM or even over the Internet and therefore accessible to anyone with a grievance, purpose, agenda, or any idiosyncratic combination of the above."²⁵ From this basis, a coalition of hate- or paranoia-based groups could give birth to a new and very dangerous transnational ideology built, like Fascism and Nazism, on fear, prejudice, and violence.

Resistance to the pace of change, interconnectedness, and global culture may become the core of future security problems. Islamic fundamentalism and most variants of nativistic ethnicism whether in Russia, South Africa, Rwanda or elsewhere, are part of this. So, too, is the neo-Luddism seen at the violent fringe of the environmental movement. Already radical environmentalists have turned to violence in the United States and Western Europe.²⁶ One of the most extreme movements, Earth First!, has already developed a coherent and violent ideology.²⁷ Against this backdrop, Edward Luttwak contends that an ideology he calls "communitarianism" will emerge from localist and extremist environmentalist groups and will pose the next great challenge to democratic capitalism.²⁸ And, reactionary political movements in the United States such as the "Freemen" and the various racist, skinhead, and militia movements must also be seen as a response to change by those unable to cope with it or who see it as a challenge to their status. In many ways, American skinhead and militia movements have much in common with the mullahs who led the 1979 Iranian Revolution. For the coming decades, the struggle between those who either favor the deep changes underway or accept them as inevitable, and those who fear and resist them will play an absolutely vital role in shaping the global security environment.

Military Currents .

The size, structure, doctrine, and equipment of future armed forces will be context-specific, reflecting the threat that they are designed to confront and the political, social, and economic system that builds them. It is possible, though, to sketch some currents of change that will affect nearly all the military

organizations that exist 25 years from now. One of these will be increasing heterogeneity among global armed forces. During periods of homogeneity, the militaries of at least the great powers are relatively similar in structure, methods, and equipment. Homogeneity arises from close contacts between armed forces including war. Sustained war is the great arbitrator, weeding out ineffective military structures, methods, and equipment. This is the reason that the periods following the world wars and the Napoleonic wars saw substantial similarities among armed forces. Even small states attempted to emulate the structure and methods of the larger, victorious powers. By contrast, heterogeneity increases in the absence of sustained war and when one state is so clearly preponderant that to emulate it would be foolhardy, challengers seek structures and methods for their armed forces different than those of the preponderant power.

Eventually there will be another period of homogeneity among the armed forces of the world, but the next few decades are likely to see increasing heterogeneity. This is due, in part, to the ongoing revolution in military affairs. Military revolutions always lead to profound differences between the armed forces that undertake them and those which cannot or do not.²⁹ Today some militaries are embracing new technology and developing doctrine, organizations, and methods to utilize it. The U.S. military in particular is integrating a wide range of digital technology and exploring the use of robotics and new synthetic materials. At the same time, many states realize they cannot afford or fully use cutting edge technology and thus continue to rely on older military structures and methods. The result is a growing gap between the unit-for-unit capability of advanced and less-advanced militaries.

Change in the definition of security is also encouraging the heterogeneity of armed forces. National security is becoming more than traditional functions such as protection against foreign enemies and the preservation of internal order as it comes to include things like economic development and ecological reconstruction. For instance, a draft defense white paper in South Africa states, "Security policy is no longer a predominantly military problem but has been broadened to incorporate political, economic, social and environmental matters."³⁰ Clearly a military configured solely for traditional functions like warfighting will be very different from one designed to support economic development and ecological reconstruction. The devolution of power from the sovereign nation-state will accelerate military heterogeneity. As sub-state and supra-state entities gain political and economic power, they are likely to form their own armed forces. Ethnic militias are a current example, but others may emerge. Eventually, the coexistence of supra-state, state, and sub-state armed forces

will make for a complex patchwork of military structures and methods.

The revolution in military affairs is having other effects as well. One is a reversal of the connection between the size of an armed force and its prowess. Numbers mattered greatly in industrial age warfare when sustained combat between sovereign nation-states was the most important form of military activity. But if advanced militaries make the organizational and conceptual changes necessary to consolidate the revolution in military affairs, small, advanced units may be more effective than the large ones of the past. At the same time, the expense of advanced armed forces, whether in terms of complicated equipment or in terms of the time required to train operators of the equipment, will make attrition warfare less viable.

A final important current of change is the blurring between things military and things civilian. In part, this derives from the increasing role that information and information technology play in military activity. There is less distinction between civilian information technology and military technology than in other arenas. The skills needed by a future "information warrior" will not be fundamentally different from those in charge of corporate information security. The distinction between daily life in the military and outside it may be insignificant. The expanding concept of national security is also leading to a melding of military and police activity. As criminals come to be seen as the preeminent security threat in many countries, and as they become better organized, better equipped, and interlinked, armed forces and police will perform many of the same functions and may eventually become indistinguishable. All of this means that the distinction between military functions and civilian functions, or between a military career and a nonmilitary career may be less evident than in the past and may eventually fade away all together.

PART II: ALTERNATIVE FUTURES

Alternative I: A State-Based Balance of Power System.

The term "post-Cold War" is still used to describe the current global security system. This suggests that the world is still in a transitional phase with the system which will replace the Cold War one not yet fully formed. It is possible, though, to use history and existing currents of change to delineate an array of feasible future security systems. One of these is a linear descendent of the current system. Its most prominent characteristic would be the persistence of autonomous nation-states which retain a near-monopoly over organized violence and use this and other forms of power to pursue national interests.

History suggests that a number of factors can lead to conflict and violence in a system based on autonomous states using power in pursuit of national interests.³¹ In fact, the right to use violence under certain conditions is a widely-accepted norm in a system based on sovereign nation-states. In particular, conflict tends to accompany power vacuums or major shifts in the power balance, particularly in the absence of skilled diplomacy. For example, in the late 19th and early 20th centuries, the decline of Turkish power in the Balkans generated conflict among Russia, Austria, and, to some extent, Germany, thus paving the way for World War I. Later, the decolonization of Africa and Asia sparked a number of conflicts pitting the Soviet Union and its allies against the United States and its allies. Power shifts can also arise when a major state undergoes a real or perceived decline in its relative power position and becomes aggressive in an attempt to forestall this. At other times, authoritarian regimes may use conflict to deflect internal discontent. Governments may collapse or weaken to the point that civil war ensues, drawing in external participants and sometimes leading to interstate war.

Interstate armed conflict may also break out through misperception or misunderstanding as states pursue their interests. Skilled diplomacy is the palliative to misperception and misunderstanding, and thus is vital for the maintenance of order and the limitation of violence in a state-based, balance of power system.³² Violence can be controlled through skillful diplomacy, but never fully abolished. Alliances and coalitions form and disband as the balance of power shifts. When any one state appears willing and able to gain ascendancy in a balance of power system, the others tend to band together to counter or balance it.

Although nation-states may use armed force against violent non-state enemies and internal wars are some of the most intractable and bloodiest, state-on-state war usually poses the greatest danger.³³ This would certainly hold in a system where a number of nations had weapons of mass destruction. In a future state-based system, national militaries would remain the dominant organizations for the use of force. The greater the global involvement of a state, the wider the range of military capabilities it would have to build. The armed forces of advanced states will see substantial technological improvement, but those with widespread commitments will often find that they cannot bring their entire military to the cutting edge given the expense of 21st century technology and talent and the diverse range of operations armed forces must perform. There will thus be substantial disparities between the units of even advanced states. States will have to decide whether the most advanced units should be the first to enter a war or saved for a decisive

moment as Napoleon used the Old Guard and other elite formations. Setting the strategic-level order of battle will be a crucial process for military strategists. (See Figure 1.)

Characteristics	Strategic Issues	Military Implications
<ul style="list-style-type: none"> • Sovereign nation-states remain most important actors • Traditional state-on-state war remains the most important use of military power • Shifting coalitions are used to balance and contain powerful states (including the United States) 	<ul style="list-style-type: none"> • How can power shifts be managed? • How can U.S. pre-eminence be maintained without provoking opposition? • How can the United States avoid overextension? • To what extent should U.S. power be used to promote intangible interests? • How can U.S. national interests be reconciled with regional or global interests? 	<ul style="list-style-type: none"> • Warfighting remains the primary mission of armed forces • U.S. military will need both unilateral and coalition capabilities • The United States could face a peer competitor, probably a coalition rather than a single state • Opponents would use asymmetric methods to contain or defeat the U.S. military

Figure 1. State-Based Balance of Power System.

State-Based System: Strategic Issues.

A number of broad, enduring issues or questions will shape American strategy in every feasible future security system. What is the appropriate extent of American involvement in the world? What types of issues or areas should be the foci of American strategy? How can public support be sustained? What is the appropriate role of military power? These broad questions, though, will take slightly different form and slightly different importance in each of the plausible future systems. In a state-based system, for instance, five macro-level strategic issues are likely to be most important.

How should power shifts be managed? Power shifts in state-based, balance of power systems are very dangerous. These can

lead to power vacuums that tempt other states to jockey to improve their position. U.S. strategy in a future state-based, balance of power security system should seek to manage power shifts, at least in key regions. This can be done by propping up a declining power--a common technique in the classical European balance of power between 1648 and 1914--or by engineering a new balance to replace a defective one.³⁴ War is usually the method of last resort for consolidating power shifts in state-based security systems. In a future system where a number of states have weapons of mass destruction, this could be suicidal for the human species. Thus developing effective procedures for the management of power shifts would be integral to American strategy in a state-based, balance of power security system. In particular, American leaders would have to gauge the effect that the information revolution has on the practice of diplomacy.

How could U.S. preeminence be maintained without provoking the formation of opposing alliances or coalitions? Americans tend to assume that others see U.S. power as benign or benevolent and recognize that the United States has no desire for territorial aggrandizement. This overlooks the fact that in a state-based international system where every nation seeks its own interests, preponderance or preeminence by one invariably causes suspicion, perhaps even fear, in others. State-based, balance of power systems have always seen formal or informal coalitions form to counter the power of a dominant state, even when the dominant power was a democracy.

Americans traditionally overlook the seriousness with which the citizens of other countries take what they see as cultural and economic imperialism. During the Cold War and the immediate post-Cold War periods, many states saw U.S. power as the lesser of evils when compared to that of aggressive authoritarian states like the Soviet Union or Iraq. But if the United States succeeds in helping spread democracy to Iraq and consolidating open government in the former Soviet Union, the nations of the world may come to see American power as intimidating or even threatening. That current American strategy stresses "engagement and enlargement" is worrisome to others even though U.S. policymakers seem unaware or unconcerned that this can be construed as imperialistic.³⁵

The belief that others will see a strong democracy as benevolent is an old one. In 431 B.C., Pericles, the leader of Athens, stated:

. . . there is a great contrast between us and most other people. We make friends by doing good to others, not by receiving good from them . . . We are unique in this. When we do kindnesses to others, we do not do them out of any calculations of profit or loss; we do

them without afterthought, relying on our free
liberality.³⁶

Within a few years of this speech, most of the Greek city-states, concerned about the power and growing arrogance of Athens, allied against it and defeated it. This precedent suggests that if the United States continued to use force and other forms of power as it did during the Cold War and post-Cold War periods, many or most of the other nations of the world would seek to contain the United States. Given this possibility, American policymakers would have to be extraordinarily careful in their exercise of power if the future security system relies on a balance of power as the major means of preserving order. Finding a nonintimidating way to use military power would be a key objective and may become a factor in the formulation of U.S. military strategy and even force structure decisions.

How can the United States avoid strategic overextension? To be a "superpower" implies some sort of involvement in all regions of the world and, taken to its extreme, in nearly all conflicts around the world. After some hesitation, the United States accepted this role during the early years of the Cold War. As the Cold War waned, the United States rejected major retrenchment. Like George Bush, Bill Clinton and his top advisers repeatedly stress that the United States intends to remain globally engaged. "The United States," President Clinton states, "recognizes that we have a special responsibility that goes along with being a great power. . . ."³⁷

In a future state-based, balance of power system, strategic overextension would be a persistent temptation. The United States could not rely on friends or allies to take actions which would be in perfect accord with U.S. national interests, and thus would be tempted to become directly involved in a wide range of global problems and conflicts. The issue of strategic "solvency"--assuring that objectives and power resources are in proportion--would remain important.³⁸ At a minimum, the United States would have to re-think its geostrategic priorities. U.S. strategy during the Cold War was clearly Eurocentric (even though American military power was used extensively in Asia). That was logical since Europe was both the region of greatest U.S. interest and the one facing the most imminent security threat. This may not hold in the future security environment. A case can be made that U.S. strategy should be refocused on the Pacific Rim or on the Americas.³⁹ This is an issue that will require much open discussion and debate before a consensus emerges.

To what extent should national power be used to promote intangible interests? American foreign policy has long had a deep streak of idealism. This has sometimes led the nation to expend power resources to promote intangible interests like democracy,

human rights, and well-being in regions with few vital tangible economic or geostrategic interests. Deciding whether the distinction between tangible and intangible interests retains relevance and, if so, how much national power should be expended to promote intangible interests will be an important part of crafting a coherent strategy if the future security system is a state-based, balance of power one.

How can national interests be reconciled with regional or global interests as the notion of sovereignty changes? A state-based security system is one in which national interests shape and drive strategy. Today, communal interests--whether of a region or of the globe as a whole--are becoming more important. These issues range from prevention of genocide to a host of ecological issues that spill over national boundaries. The traditional notion of sovereignty that gave a state full license within its boundaries is also changing. Thus a future state-based security system would see the coexistence of national interests and communal interests. Reconciling the two and deciding how much sovereignty to surrender to supra-state organizations or authorities could pose a major problem for American leaders.

State-Based System: Military Implications.

In a state-based, balance of power security system, the revolution in military affairs would change the structure, doctrine, concepts and equipment of the U.S. military but not the ultimate strategic missions. Warfighting against the military forces of other states would remain the primary task of the American armed forces with nation support and humanitarian relief secondary. Balance of power systems tend to be characterized by fluid coalitions and alliances rather than formal, long-standing ones, so the United States would need to retain a substantial capability for unilateral action and for leading ad hoc, mission-specific coalitions. And, to avoid ostentatious displays of military power that might provoke opposition, forward presence would probably be reduced if not abandoned. In fact, the U.S. military could lose all of its large, permanent overseas bases. This would suggest a need for the ability to rapidly construct temporary bases for power projection, or to project power from the continental United States alone. In general, power projection could become more the application of effects from long range rather than the actual deployment of forces configured for close engagement. As a result, American ground forces would probably be fairly small.

In a state-based, balance of power system, the United States could continue to face substate and regional threats, but could also be confronted with a peer competitor. Given the historic tendency of opposition to coalesce against a preeminent state,

this would probably be a coalition rather than a single state. Existing U.S. military strategy, which assumes that American forces will face a single rogue state rather than a hostile coalition, would have to be revised to reflect this. And, U.S. military strategy and doctrine in a state-based balance of power security system would have to deal with extensive asymmetry. This would take two forms. One is asymmetric coalitions as American armed forces sometimes operate in conjunction with other militaries with very different organization and doctrine. The second is asymmetric threats. Future opponents will likely avoid confronting the U.S. military on its own terms and, instead, seek methods of confrontation and warfare in which the United States is weak. These asymmetric threats would usually target American political vulnerabilities, particularly the difficulty accepting substantial casualties in conflicts where vital interests are not directly challenged. Enemies in a future state-based system will often use weapons of mass destruction to counteract U.S. conventional forces, eroding American morale and political will through low-intensity operations, especially terrorism aimed at U.S. nationals abroad and within the United States. Terrorism would probably increasingly move into information attacks and those attempting what Walter Laqueur calls "terrorist superviolence." Laqueur notes, "An unnamed U.S. intelligence official has boasted that with \$1 billion and 20 capable hackers, he could shut down America. What he could achieve, a terrorist could too."⁴⁰ Terrorism aimed at information infrastructure and using weapons of mass destruction would become a major problem for the U.S. military in a state-based security system.

Alternative II: A Trisected Security System.

In some security systems, there is a clear, central source of conflict. But these are rare. The norm is a system shaped by several more-or-less coequal sources of conflict. The future system may fit this mold. Since interconnectedness and demassification are advancing at different rates in different parts of the world, the likely result is a global system composed of three tiers. Trisection is actually a common pattern for global or regional political systems. The ancient Greeks and Chinese divided the world into "civilized," "semi-civilized," and "barbarian" parts. Muslims distinguished those who followed Islam, the "peoples of the book" (Jews and Christians who shared some basic religious tenets with Muslims), and heathens. The "world-system" analysis that became popular in Western universities in the 1970s reflected a more economically-oriented scheme based on "core," "periphery," and "semi-periphery."⁴¹ Even more recently, scholars and strategists talked of the First, Second, and Third worlds while Marxists divided the world into capitalist, socialist, and proletarian segments. This frequent recurrence of trisection suggests that it may be a natural form

for international systems.

If the future security system should once again be a trisected one, the First Tier of the system will be characterized by stability, prosperity, and multidimensional integration. Its economies will depend on the management, manipulation, and creation of information rather than traditional heavy industry. Demassification and interconnectedness will be most strongly felt here. Businesses (and, eventually, governments) will stress flexibility and creativity, with a diminishing distinction among management, development, and production in terms of both functions and people. Economic interdependence and cultural homogeneity will link the First Tier into a seamless web. As the First Tier integrates, concepts such as national interests, national boundaries, and sovereignty will decline in significance. Governments will often see themselves as the agents of business. Even though First Tier regions will experience some serious political conflict growing from the difficulty in adjusting to the various currents of change, governments will be generally effective at least in providing basic resources like security. Democracy will be increasingly participatory as technology allows a regular and sustained citizen role in political decisionmaking. Aversion to violence will be a major component of the First Tier ethical system. Force will be seen as an absolute last resort, with intense pressure to keep military activity quick and cheap. Security strategies will stress conflict prevention; military strategies will be defensive.

The Second Tier will be composed of what are today known as "newly industrializing countries" and the more advanced states of the former Soviet bloc. Traditional industrial production will remain the economic bedrock. The distinction among management, development, and production will persist, with social status and political power closely linked to an individual's position in the productive process. The state and business will sometimes be coequals; at other times, one or the other will temporarily dominate. The sovereign nation-state will remain the central political and economic institution. The most intense political debates in the Second Tier will pit those who seek greater integration into the First Tier-dominated world culture and economy against those who oppose it and, instead, favor economic nationalism and cultural particularism. The Second Tier will see cycles in which representative democracy emerges only to later be replaced by some form of sham democracy or outright authoritarianism. The shifts to and from democracy are likely to be violent. Secessionism will pose a major challenge to the governability, viability, and stability of many Second Tier states. In fact, secessionism in the Second Tier will pose some of the most dangerous challenges to the stability of the future security system. Sovereignty will be jealously guarded by Second Tier leaders. Their security and military strategies will remain

imbued with the notion of just war and the idea that national interests sometimes require the use of state-controlled violence.

By contrast, economic stagnation, ungovernability, and violence will be pervasive in the Third Tier. Informal economies based on subsistence production, barter, and crime will be more important than the formal economy for most citizens of the Third Tier. Parts of the Third Tier will remain linked to the global economy through the extraction and export of primary products and the import of manufactured goods and foreign aid, but this will only affect a small proportion of the population. Governments will continue to dominate these shrinking formal sectors of the economy, with the relationship largely a parasitic one. Most areas of the Third Tier will abandon or be abandoned by the world culture, thus leading to the emergence of distinct micro-cultures. Ironically, this will be something of a boon since it will lead to the export of intellectual products like art and music to First Tier consumers in quest of "something different."

The Third Tier will experience recurrent bouts of ungovernability. The effectiveness of the state will drop dramatically outside major cities, and will be minimal even in large parts of the urban areas. Outright anarchy will be common, and many current states will fragment. Democracy will be attempted but almost always fail. Ungovernability will be exacerbated by an accelerated "brain drain" as the educated and ambitious immigrate. Ironically, though, there will also be immigration into the Third Tier by groups of economic, political, and cultural dissenters from the First Tier which reject integration into the global economy and culture. If history holds, these groups may energize otherwise stagnant economies. Where the First Tier will be characterized by a widespread aversion to violence and the Second Tier by the notion that violence is justified under certain conditions (e.g., when used by the state in pursuit of legitimate national interests), violence in the Third Tier will be a routine part of daily life. Ethical constructs like "just war" or casualty aversion will have little meaning in a region where gunfire, explosions, coercion, and personal brutality are depressingly normal. (See Figure 2.)

Trisected System: Strategic Issues.

For the United States, the most important characteristics of a trisected security system would be the heterogeneity and complexity of the strategic environment. First Tier states would

Characteristics	Strategic Issues	Military Implications
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- Global security system divided into three parts: (1) an advanced, integrated, stable First Tier with information-based economies; (2) a Second Tier of diverse and autonomous states with uneven stability and manufacturing-based economies; and, (3) an unstable, violence-prone Third Tier relying largely on extraction and informal economies
 - The sources of conflict vary among the three tiers
 - First Tier states will not make traditional war on each other; there will be state-on-state war within the Second Tier; Third Tier states will be incapable of sustained, large-scale warfare
 - To what extent should U.S. strategy focus on one tier of the system?
 - If U.S. strategy is focused, what tier should it concentrate on?
 - How can U.S. interests be promoted in Second Tiers?
 - Will power projection and conflict resolution remain core elements of U.S. strategy?
 - To what extent should the United States retain a unilateral military capability?
 - To what extent should the United States integrate with the rest of the First Tier?
 - The U.S. military will develop along the lines suggested by the current RMA
 - Information warfare is very important for the U.S. military
 - The United States will sometimes use traditional force against Second and Third Tier opponents
 - The U.S. military will seldom if ever pursue sustained campaigns, so the role of the Army will decline relative to the Air Force and Navy
 - Second Tier militaries will remain traditional, combined-arms forces
 - Third Tier militaries will usually be militias, private armies, and terrorist organizations
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Figure 2. Trisected Security System.

not make traditional war on each other, so terrorism would be the only direct threat to the territory of the United States. Since most applications of U.S. military power would continue to be overseas, American strategy would focus on minimizing casualties during military operations. Six key questions would shape U.S. national security strategy.

To what extent should U.S. national security strategy focus on one tier of the global security system? In a trisected global system, the United States will have interests of one sort or the other in all three tiers, but to expend substantial power

resources in all three simultaneously would risk dangerous over-extension. This suggests that American strategy should focus on one or two of them. The question is: Which one? To resolve this, policymakers and the American public would have to reach consensus on the level of risk the United States is willing to accept.⁴² If the nation can tolerate a high level of risk in one tier, resources can be concentrated in the other. Moreover, American strategy must also reconcile the risk of overextension with risks to specific interests in one of the tiers of the system.

If the United States chooses to focus its strategy on one tier, which one should it be? A rationale can be developed for an American strategy focused on each of the tiers of a trisected security system. Just as today the United States has the greatest economic and political interests in the areas of the world that will develop into the First Tier--North America, Western Europe, and parts of the Pacific Rim--future U.S. ties to the First Tier will be crucial. On the other hand, the security threats from the First Tier are likely to be less overtly dangerous than from the other two tiers, particularly as the First Tier undergoes economic, political, and cultural integration. The fact that Second Tier states will have the industrial and organizational base to support large armed forces and sustained military operations--and that many of them will have weapons of mass destruction--suggests a strategy concentrated on this sector of the global security system. This might be a matter of pure strategic triage: the security situation in the First Tier will probably not require the extensive application of U.S. power. The problems of the Third Tier cannot be remedied by any feasible level of American involvement; but the Second Tier may be both dangerous and amenable to active U.S. engagement. At the same time, though, the humanitarian needs of the Third Tier will be most pressing. All this means that American policymakers and the public must decide which will be the guiding criterion of national strategy: the extent of American interests, the extent of the danger inherent in a particular region, or the extent of human need.

How should U.S. interests be protected and promoted in the tiers of the global security system which are not the focus of American strategy? Even if U.S. strategy focuses on one sector of a three-tiered system, interests in the other tiers would have to be promoted and protected. This might be done through nonmilitary means. American policymakers would have to decide how and when military force might be used in what are defined as "secondary" tiers. In general, military strategy in secondary tiers could follow three broad patterns. It could focus simply on containment through maritime and aerospace power (including missile defense) without using forward presence or pursuing conflict resolution. It could seek to deter aggression in secondary tiers through

periodic direct applications of military force, most often by stand-off precision strikes. Or, it could rely on coalitions. Actual American military strategy for secondary tiers would probably blend these three approaches in some way and would shift as technology and political conditions change.

Will power projection and conflict resolution remain core elements of the U.S. strategy? Power projection and conflict resolution became important parts of American national security strategy during the Cold War. Power projection kept conflict away from American shores. Policymakers considered conflict resolution, which entails the amelioration of the underlying political, social, and economic causes of violence rather than simply winning battlefield victory, important and concluded that most conflicts left unresolved would not solve themselves, but would eventually reemerge. In a future trisected security system, Americans may reconsider this stress on power projection and conflict resolution. Both are expensive and dangerous. They invite asymmetric responses, especially terrorism aimed at Americans or targets within the United States, and can require long commitments of human and financial resources. Given this, it is possible that future American strategy will be much more defensive, stressing maritime and aerospace control with ground forces used solely for spoiling attacks or to supplement allies facing aggression. This issue must be debated and a consensus reached if U.S. strategy in a trisected world is to be coherent and effective.

To what extent should the United States retain a unilateral military capability? Current American national security and military strategy commit the nation to working with allies and coalition partners whenever possible but also stress the need for a full-spectrum unilateral capability. JCS Chairman General John M. Shalikashvili, for instance, lists "decisive unilateral strength" as one objective in his *Joint Vision 2010*.⁴³ In a trisected world of 2020 and beyond, though, the United States may not be willing or may not see the need to maintain decisive unilateral strength. The integration of the First Tier may mean that all military operations except the very smallest are coalition endeavors. The question of how long to retain decisive unilateral capability is likely to be a persistent one in the coming decades. That, plus the decision concerning which tier of the system to focus on, will drive the size of the American military.

To what extent should the United States pursue integration with the rest of the First Tier? As the First Tier of a trisected system undergoes economic, social, and then political integration, there is likely to be mounting public pressure to integrate national armed forces in order to limit defense expenditures. First Tier militaries which often operate in

coalition may decide to specialize rather than seek a full spectrum capability. And, beyond simply making militaries more compatible, the First Tier is also likely to see increased formal coordination during strategy and policy formulation. A key issue for the United States will be how rapidly to accept this process of integration. The United States will probably resist longer and more strenuously than most other First Tier states but will accept some integration in the end.

Trisected System: Military Implications.

In a trisected global security system, each tier would focus on different forms of conflict and configure their military forces accordingly. First Tier militaries will probably develop along the lines suggested by current thinking about the revolution in military affairs.⁴⁴ Armed forces will be small in terms of the number of people involved, but will make extensive use of technology. Robotics, information technology, and nanotechnology--the ability to mechanically manipulate molecules and molecular structures during assembly and manufacture--will become increasingly important.⁴⁵ Military units will be extremely flexible, able to rapidly reorganize and adapt to a wide variety of tasks. Defensive information warfare--protecting information systems against hostile action--will be an important military mission. First Tier armed forces will also develop offensive information warfare to disable or confuse opponents. In fact, information warfare will be the only type of military action that First Tier states would consider using against each other given the restraints growing from interconnectedness. However, information warfare will also have utility against Second Tier and even some Third Tier enemies.

Even though First Tier states will not wage traditional war against each other, they will occasionally use violence against Second Tier and Third Tier enemies. As First Tier states prepare for this, the need to minimize casualties will play a major role in force development. For instance, weapons systems will be deconstructed in that the sensor, operator, and strike platform will be physically separated rather than coterminous as in many of today's planes, warships, tanks, or infantry units. Soldiers on the future battlefield, Brian Nichiporuk and Carl H. Builder suggest, may be more important as sensors feeding information to distant strike platforms than as a source of firepower.⁴⁶ At the same time, robotics and other brilliant weapons platforms will become increasingly important. Long-range, stand off strikes and reliance on nonlethal or less-lethal weapons (including weapons aimed at psychological incapacitation rather than physical harm) will be the norm.

Because of casualty aversion and the expense of weapons

systems based on advanced technology, what might be called "burst" operations will replace sustained campaigns as the most important form of military activity. Political decisionmakers will be unwilling to use their powerful but small and casualty-averse militaries in any activity that cannot be completed quickly. Militaries will adapt to this by the revolutionary transformation of doctrine and mastery of burst operations. Burst operations will not require or allow mobilization, whether of military forces or political support, so military reserves will not be important. Military strategy will largely consist of active defense and spoiling or punishing attacks. These attacks are likely to become more psychologically sophisticated as First Tier military planners learn how to structure and time strikes to have the maximum psychological impact on target audiences. The main tasks of senior military leaders will be to rapidly adapt and reconfigure military organizations as tasks and conditions change, and to plan burst operations. Given this, the essence of strategic leadership will be creativity in complex and compressed decision environments.

First Tier states will also undergo radical changes in civil-military relations. The core dilemma for traditional civil-military relations was finding a way to cultivate and sustain a body of people with the ability to do things considered abnormal by civilians--to transcend physical discomfort, master fear, and kill or coerce enemies-- without undercutting the day-to-day comity that undergirds society. This required simultaneously cultivating a warfighter's ethos and instilling the belief that violence must only be used under very special circumstances and against specific targets. Stable civil-military relations kept warfighters separate from the rest of society (physically and psychologically) without allowing them to become so isolated that they might turn against society. In the future, this may not be necessary. First Tier armed forces seldom will need to undergo physical hardships or kill at close range. Killing itself will be limited. When it does become necessary, it can be done from far away or by robots. This means that First Tier states will no longer have to erect a psychological and attitudinal wall between the military and society. Soldiering will be much like any other white-collar job. The notion of a distinct military ethos will become quaintly archaic.

By contrast, the armed forces of Second Tier states will still focus on war in the traditional, Clausewitzian sense with its sequence of preparation, mobilization, combat operations, and demobilization. They will also retain distinct militaries organized around separate services defined by the medium in which they operate. Because Second Tier states will have a higher tolerance for casualties, their militaries will place relatively less emphasis on expensive technology and more on the blood of soldiers, marines, sailors, and airmen. Unlike First Tier armed

forces, Second Tier militaries will be capable of sustained, costly, intense operations or campaigns. Second Tier militaries will rely heavily on commercial technology. They will also remain vulnerable to information warfare since they will be end-users of cutting edge technology rather than its masters.

Nuclear weapons may be used somewhere in the Second Tier before 2020. If this happens, it will result in such a political backlash that for nation-states, weapons of mass destruction will be relegated to a purely deterrent role (although terrorists will continue to find them useful). Second Tier militaries will have a moderate power projection capability against each other, but will have limited or no success against First Tier armed forces. The essence of strategic leadership for Second Tier militaries will remain synchronization during complex operations and the balancing of short-term and long-term security considerations. Civil-military relations will follow the 20th century model, with the military psychologically and physically separated from civilian society but usually controlled by civilians.

Third Tier armed forces will take the form of armed gangs, militias, the personal armies of warlords, and terrorist groups. The Third Tier will have no indigenous military production, so its armed forces will have very limited ability to wage sustained, combined-arms operations. The norm will be short, intense periods of combat that exhaust military supplies followed by long periods of low-level fighting or maneuver. In general, there will be no clear distinction between war and peace since much of the Third Tier will experience nearly constant, low-level organized violence. As in Europe before the Treaty of Westphalia, the acquisition of materiel or loot is likely to be the preeminent objective of Third Tier military operations. Terrorism will be the only form of long-range power projection available to Third Tier political organizations. But, because the nature of Third Tier life will cause an erosion of ethical restrictions or inhibitions on the use of violence, states or warlords will have no compunction about using terrorism. The most important leadership skill will be the ability to motivate subordinates to accept danger and remain loyal. Personal charisma, which will matter less in First Tier and Second Tier armed forces, will characterize successful Third Tier military leaders. There will be little distinction between the military and society, and thus no civil-military relations in the traditional sense.

In general, conflict across the three tiers will be like the children's game "scissors, paper, and rock." High-tech First Tier militaries will be able to defeat the large and somewhat lower-tech forces of Second Tier states with relative ease, but will find casualty aversion a serious constraint when fighting the militias, terrorists, and private armies of the Third Tier. Second Tier militaries, with their large size, ability to

undertake sustained, intense operations, and greater tolerance for casualties, will have more success against Third Tier forces. And, while Third Tier forces will be unable to stand and face Second Tier militaries, they will find that their lack of inhibition on the use of indiscriminate violence gives them some influence in the First Tier, particularly when they can use terrorism to extort aid or deter intervention. This all means that First Tier militaries will be able to trump Second Tier, Second Tier militaries will be able to trump Third Tier, and Third Tier will be able to trump First Tier.

Alternative III: The Renaissance of Ideology.

With the collapse of Marxism-Leninism, the world is not clearly divided by competing transnational ideologies. This may be a temporary lull rather than a permanent "end of ideology" as predicted by Daniel Bell in the 1960s or, more recently, by Francis Fukayama.⁴⁷ Humans seem to have an instinctive psychological need for some sort of mass belief system--whether it is called a political ideology or not--that explains social conditions and offers apparently coherent solutions to political and economic problems. As the 21st century approaches, it might seem that nationalism and ethnicism have supplanted ideology as the primary framework of social and political identity. This overlooks the fact that nationalism is only on the rise in a relatively small segment of the global security system--the former Soviet bloc. The same is true of the argument that ethnicity will be the dominant political force in the future security environment. This only holds for regions a generation or two removed from colonialism (whether European or Soviet) and very well may subside in the early 21st century. As global interconnectedness grows, it is possible that nationalism and ethnicism will no longer define political divisions and thus not serve as the primary sources of world conflict. Given the intense pace of change that will characterize the 21st century and the feelings of powerlessness that it will generate among much of the world's population, conditions may be ripe for the reemergence of transnational ideologies.

The ideologies of the future could take several forms. Samuel P. Huntington has argued that the next pattern of conflict may be a clash of civilizations.⁴⁸ "Civilizations" in the sense that Huntington uses the term are psychologically related to ethnicity, but are based on beliefs, values, preferences, and norms rather than the sort of physical or linguistic characteristics that undergird ethnicity. In Huntington's schema, the "fault line" running through Europe that divides Western Christianity from Orthodox Christianity and Islam will be particularly dangerous. This could lead to a bipolar security system pitting nations based on Western culture (to include

Japan) against a coalition of non-Western cultures. There are other conceivable configurations for an ideological bloc system: democracies versus anti-democracies, capitalism versus anti-capitalism of some sort, modernizers versus anti-modernizers, globalists versus regionalists, and so on.

In any security system dominated by ideological blocs, most armed conflict will occur along the fault lines or grey areas. War will sometimes accompany the process of establishing or adjusting the boundaries between blocs. Violence may break out when a state attempts to move from one bloc to the other. Violence would also be associated with attempts by members of one bloc to support dissenters inside opposing blocs since whenever ideology is intense, governments have little tolerance for internal opposition. Witness the "red scares" in the United States in the 1930s and 1950s, and Stalin's various purges. Conflict and violence in an ideology-based system would range from terrorism and insurgency through full-scale coalition war, so militaries would need to retain a wide range of capabilities. Within blocs, militaries would probably develop along similar lines, in part to facilitate coalition operations. But, as during other ideological struggles whether the Cold War or the Crusades, there would be significant differences between the military forces of the blocs. Because violence between conflicting belief systems tends to be particularly vicious, there would be little pressure to limit collateral damage or civilian casualties during military operations. Decisive victory at any cost would be the preeminent criterion for military strategy and force development. (See Figure 3.)

Ideology-Based System: Strategic Issues.

Because ideology often breeds hatred and passion, a future security system dominated by it would be particularly dangerous. Seven strategic issues would be the most important for the United States.

What is the appropriate extent of U.S. involvement in global security affairs? Even in a future with extensive political, economic, and social interconnectedness, large-scale violence in an ideology-based security system will likely occur far from the United States. This, in conjunction with the inherent danger of

Characteristics	Strategic Issues	Military Implications
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- Competing or conflicting transnational ideologies structure the global security system
 - Most conflict occurs on the fault lines between ideological blocs
 - The use of force is only partially or weakly contained by normative restraints
 - What is the appropriate extent of U.S. involvement in global security affairs?
 - How can the system's rules be consolidated?
 - How can conflicts be localized or contained?
 - How can the use of weapons of mass destruction be avoided?
 - How can the American public be mobilized but not inflamed?
 - If global schisms are religious, how can the United States avoid domestic tension?
 - How can the United States craft a holistic strategy?
 - The U.S. military would be larger and more robust than in other feasible security systems
 - Power projection and support to allies would remain key components of U.S. military strategy
-

Figure 3. Ideology-Based System.

an ideology-based system, would encourage isolationism in the United States. In fact, pressure for retrenchment or disengagement of some type would probably be stronger in an ideology-based system than in any other sort. This means that deciding on the appropriate degree of American involvement would be the cornerstone strategic issue in such a system. Options range from military disengagement to full engagement as in the Cold War. The extent of American involvement in world affairs would be the prime factor determining the size of the U.S. military in an ideology-based system.

How can the "rules of the game" be consolidated? Every international system has rules. These are sometimes codified through treaties and international law, but can also take the form of informal strictures and parameters. Rules are sometimes breached but, the more they are adhered to, the more stable the system. In a state-based, balance of power system, the rules tend to be fairly well understood but states face some uncertainty as to who their friends and enemies are since coalitions shift easily. An ideologically-based system is the opposite: states in hostile ideological blocs know who their enemies are, but the misperception and mistrust that accompanies ideological schisms

often lead to unclear or poorly understood rules of the game. In a future ideologically-based system--especially one where many states and even some sub-state actors have weapons of mass destruction--the United States would need to find ways to clarify the rules of the game as quickly as possible.

How can conflicts be localized or contained? The worst possible situation in an ideologically-based system is total war between opposing blocs. Historically, such conflicts were devastating; in an era when weapons of mass destruction are increasingly widespread, full-scale inter-bloc war could literally lead to the obliteration of the human species. Because of this, the major powers in an ideology-based system must undertake great efforts to develop mechanisms for cauterizing and containing regional conflicts. There are a number of mechanisms for this: non-intervention agreements, bolstering the defense of states surrounding an area of conflict, collaborative intervention by the major powers, and so on. The most effective mechanism will, of course, depend on the specifics of a conflict. But the leaders of hostile ideological blocs must recognize and agree on the dangers of allowing regional conflicts to escalate--a lesson lost in 1914 on the leaders of a European system that had transmuted from a balance of power one to an ideological one.

How can use of weapons of mass destruction be avoided? If the future security system does become an ideological one, weapons of mass destruction will hang over every major conflict like the sword of Damocles. By the time the future security system coalesces, many states will have weapons of mass destruction and the means to deliver them. Nonproliferation as it existed in the last few decades of the 20th century will be obsolete. It is possible, perhaps even likely, that weapons of mass destruction will be used at some point in the next 30 years. It will be incumbent on all the great powers, particularly the United States, to mobilize pressure to prevent their use from becoming routine. This will be difficult in an ideologically-based system with its intense passions and hatreds.

How can the American public be mobilized but not inflamed? If the United States opts for active engagement in a future ideologically-based system, American leaders would have to find a way to mobilize the public for the sacrifices and efforts such engagement would entail but avoid inflaming the public to the point that there is pressure for war. Building and sustaining this fragile balance between too little public passion and too much was actually one of the great (but overlooked) successes of the Truman and Eisenhower administrations during the early years of the Cold War. If the future security system is an ideological one like the early Cold War system, such an endeavor would have to be undertaken by future U.S. administrations. Their success or

failure would be an important determinant of the overall stability of the global security system.

If global schisms are based on religion, how can the United States avoid domestic tension? If analysts like Samuel Huntington are correct, religion--particularly tension between Islam and Christianity--will play a major part in determining the fault lines and schisms of the future security system. This will pose some serious domestic problems for the United States. The United States is becoming increasingly multicultural. The number of Islamic Americans in particular is growing rapidly. According to Elisabeth Siddiqui:

At present, the number of Muslims in the United States is estimated to be on the order of between 5 to 8 million. It is the fastest growing faith in this country. Estimates indicate that by the year 2000, the number of Muslims in the United States will be greater than that of the Methodists, and that by the year 2010 the number will have doubled to 10 to 16 million. The estimated conversion rate among Americans is 135,000 per year. The Defense Department reports that there are now approximately 9000 Muslims on active duty in the U.S. armed services (it is reported that more than 3000 Americans embraced Islam during the Gulf war alone). A vast network of Muslim ministries also caters to some 300,000 converts in prisons, with an estimated conversion rate of 35,000 per year.⁴⁹

American Muslims have already faced harassment following acts of terrorism linked (or thought to be linked) to the politics of the Middle East.⁵⁰ In an ideologically-based future security system, this could be much worse. If the future global security environment is dominated by Islam/Christian differences, American leaders will have to be careful to prevent this from exacerbating tensions within the United States.

How can the United States craft a total or holistic strategy? More than any other type of security system, ideologically-based ones require a "total" or holistic strategy fully integrating the political, economic, psychological, and military elements of national power.⁵¹ For a variety of reasons, some dealing with the distribution of power within the government and some dealing with an attitude toward the use of force that sees it as an aberration rather than an integral part of strategy, crafting and sustaining a coherent, holistic strategy is somewhat difficult for Americans. To do so in a exceedingly dangerous ideologically-based security system would probably require fundamental reform of the strategy-making mechanisms used in the United States. In particular, inter-agency cooperation would need to be strengthened. This would require fundamental

reform of the policymaking system. Because major reorganization always leads to the loss of power by some individuals or institutions and its transfer to others, such change would be difficult and require sustained, high-level involvement.

Ideology-Based System: Military Implications.

The inherent rigidity of an ideologically-based security system diminishes the effectiveness of diplomacy. In a world filled with weapons of mass destruction, states will attempt to forestall conflict with diplomacy, but it is always difficult to negotiate on core beliefs and, in an ideologically-based system, that is what is at stake. Many diplomatic stratagems are ruled out *a priori* because they are seen as "striking a deal with the devil." As a result, the military element of national power rises in importance. The U.S. military could probably expect higher defense expenditures and a larger force in an ideologically-based security system than in one built on a flexible balance of power.

An ideologically-based system has a much clearer and more rigid strategic geography than a balance of power system since conflict and violence tend to occur along the fault lines or grey areas between the ideological blocs. If American policymakers opt for extensive U.S. involvement in promoting the security of one bloc or in serving as some sort of buffer between them, that is where the military would be involved. In addition to deterring aggression and defending along the bloc fault lines, the U.S. military would also be used to reassure weaker or nonaligned states by helping them with external defense and with internal order. Because an ideologically-based system would involve long-standing, formal alliances rather than the fluid, ad hoc coalitions that typify a balance of power system, the U.S. military would have the time necessary to resolve interoperability problems with its partners. The problem of asymmetry--which is sure to arise as the United States pursues the revolution in military affairs and other nations cannot or do not--would persist. And, because the zone of conflict in an ideologically-based system would be geographically defined, this is the global security system that would require the greatest amount of U.S. landpower (assuming American policymakers opt for engagement). This does not necessarily imply that an extremely large U.S. Army would be necessary since the revolution in military affairs is likely to allow technology to compensate for numbers, but effective U.S. landpower would be required to support and bolster allies in the zone of conflict.

Alternative IV: Internal Collapse.

Strategic thinkers such as Ralph Peters and Martin van Creveld contend that the most significant source of conflict in

the future security system will not be traditional state-on-state war, but the power struggles involving sub-state actors such as criminal cartels, militarized gangs, private armies, terrorists, ethnic militias, and insurgents.⁵² Even developed states would face serious threats from organized crime, urban gangs, regional separatists, conspiracy-theory terrorism, radical cults, neo-Luddites, and violent environmentalists. If this comes to pass, the future security system may be one in which the primary threat is internal disorder.

In such a system, democracy and civil rights would be abrogated in the name of public safety. Authoritarianism would be the norm; anarchy would be common in regions with less resilient or resource-rich states. Governments would be so busy dealing with internal problems that they would have little energy or inclination for traditional interstate war. The major form of military power projection might be the support or threatened support of rebels, insurgents, terrorists, and militias destabilizing hostile states. Militaries would take the form of national police, gendarmes, or special forces. They might be high-tech, but would have little capacity for large-scale, long-range power projection. Nations would build armed forces to counter insurgency, terrorism and other forms of violence within the state's borders and inside friendly states, and to support insurgency and terrorism within the borders of enemies. The major factors distinguishing the armed forces of different states would be the level of technological advancement and the degree to which the use of violence against internal enemies was constrained or unconstrained. In general, more advanced militaries could afford to be more restrained in the use of violence, substituting technology, especially information and psychological technology, for primitive violence. Less sophisticated armed forces would have to rely on old-fashioned brutality. (See Figure 4.)

Internal Collapse: Strategic Issues.

The United States would face four major strategic issues in a global security system characterized by internal conflict and the collapse or near-collapse of national governments.

Characteristics	Strategic Issues	Military Implications
<ul style="list-style-type: none"> • The primary threat to security is internal vio- 	<ul style="list-style-type: none"> • How and where should the United States help reestablish order? 	<ul style="list-style-type: none"> • Traditional, state-on-state war would be very rare,

lence rather than state-on-state war

- Many weak states will fragment or collapse into anarchy
- Even strong, developed states face internal challenges and will sometimes respond with draconian methods

- Should the United States support friendly tyrants, warlords, or separatists?
- How should the United States deal with militias, terrorists, and criminal gangs armed with weapons of mass destruction?
- Should the U.S. military be internally or externally focused?

so conventional war-fighting would not be the primary mission of the U.S. military

- Units similar to current Special Forces would dominate the U.S. Army
- The role of the Air Force and Navy in U.S. military strategy would diminish

Figure 4. Internal Collapse.

Where and how should the United States help reestablish order? A global security system permeated with internal collapse and endemic violence between a chaotic array of militias, warlord armies, and gangs of various kinds could stoke isolationism within the United States. There would be a great need for humanitarian involvement but engagement would often be entangling, risking violence against Americans for limited political gains. The tendency in the United States would be to provide humanitarian assistance where possible and punish armed groups for direct attacks on Americans, but, other than that, to simply let warring factions kill each other until they tire of it and request outside political involvement and, sometimes, peacekeepers. The notion that a conflict is only "ripe for resolution" under specific conditions would gain wide credence among strategic thinkers.

American involvement in a world dominated by the collapse of political order could be measured on two scales which, to some extent, overlay one another. The first is geographic. The United States would have to decide whether to continue to pursue global engagement or to limit itself to one or a few regions. Clearly, it would be more difficult to disengage from a chaotic Central America and Caribbean than an equally disorderly Africa. The second scale of involvement would be one of intensity. The greatest level of involvement would engage the United States (including the U.S. military) in defending friends, punishing aggressors, and actively working to engineer solutions to various conflicts. The other end of the scale would be minimal involvement, perhaps only the provision of relief supplies to multinational or private humanitarian organizations. In between would be a whole range of options involving the greater or lesser

use of American power. A consensus on where American strategy should fall along these two scales would be fundamental.

Should the United States support friendly tyrants, warlords, or separatists? As in contemporary Somalia and Bosnia, there would seldom be a clear "good guy" in a security system permeated by internal collapse. Most of the time, all the groups locked in conflict would be guilty of some sort of transgression of human rights and civil liberties. Yet many of them would seek U.S. assistance and would be willing to offer political and economic rewards in exchange. As during much of the Cold War, the United States would have to decide whether to accept, perhaps even embrace, friendly tyrants, warlords, or separatists. Good arguments can be made both for and against this. On one hand, if tyrants, warlords, or separatists are the only sources of local power and authority, working with them would be the sole method by which the United States could influence the situation, bring humanitarian relief, and possibly prod a conflict toward resolution of some sort. On the other hand, developing a relationship with friendly tyrants, warlords, gang leaders, and separatists always runs the danger of associating the United States with unsavory, embarrassing, perhaps even evil friends, with a concomitant erosion of prestige and public support for an activist policy. This issue was important in shaping post-Vietnam U.S. policy in the Third World.⁵³ In a future system characterized by the collapse of states, it would surface again.

How should the United States deal with militias, terrorists, and criminal gangs who are able to acquire weapons of mass destruction? Even though militias, terrorists, and criminal gangs may not be able to muster the technological resources to develop their own weapons of mass destruction, they will eventually capture, steal, or purchase some. These may be "traditional" weapons based on biological, chemical, or nuclear technology. Even today, terrorists are actively pursuing these things.⁵⁴ Or the weapons of future terrorists may instead be computer programs or devices able to do massive and rapid damage to national electronic infrastructure. While it is impossible to predict how and where this will happen or what the appropriate response will be, it is fairly certain that the United States will have to deal with new levels of terrorism in coming decades. Because of this, an important part of U.S. strategy in a global security system dominated by the collapse of states would be finding effective ways to limit the acquisition of weapons of mass destruction by violent sub-state organizations, to deter or preempt the use of the weapons if such groups do acquire them, and to respond to blackmail if deterrence or preemption fails.

Should the U.S. military be internally or externally focused? In a global security system dominated by internal disorder, the United States is likely to experience similar

problems. While the total collapse of internal order in the United States is unlikely, a range of challenges from urban street gangs, high-tech extortionists, conspiracy-theory terrorists, violent right-wing organizations to racial separatists is at least conceivable. Under such conditions, American leaders and the American public would have to decide whether to return the military (particularly the Army) to its historic mission of preserving internal order in regions where police are incapable of doing so, or to keep the military focused on defense against external enemies with only secondary responsibility for internal order. If the internal challenge was so great that the American people decided to use the military, major changes would have to be made in law and attitudes, as well as the organization and doctrine of the armed forces.

Internal Collapse: Military Implications.

In a security system dominated by internal disorder and the collapse of state authority, there would be little sustained, state-on-state war. States would use force to intervene in neighbors and stem the spillover of disorder, but seldom against each other. This would mean that the U.S. military would abandon its conventional warfighting mission and focus instead on internal order, counterterrorism, nation assistance, peace support operations, and humanitarian relief. The Army could be dominated by Special Forces with small, flexible units given extensive training in languages and local politics and designed to provide advice and training to allies. The revolution in military affairs, which so far has focused on conventional state-on-state warfare, would be altered to produce more efficient and effective means of operating in a low-intensity conflict environment.⁵⁵ A security system dominated by internal disorder and the collapse of states would be one in which the U.S. Air Force and the U.S. Navy would play a smaller role than in some of the other future alternatives. Aerospace and naval power would be used primarily for border patrols, anti-smuggling activities, and prevention of illegal immigration, with some capacity for small but long-range, precision strikes.

Alternative V: Economic Warfare.

A final plausible future security system is one characterized by intense, sometimes violent competition between nations and transnational entities for resources and markets. This is similar to Edward Luttwak's concept of "geo-economics" which mixes the traditional, adversarial, zero-sum, and paradoxical logic of conflict with commerce's blend of competition and cooperation.⁵⁶ In such a system, there are two possible military frameworks. In the first, states and governments retain a near-monopoly on organized violence and the

legitimate use of force, and continue to serve as agents of commercial organizations. Actions which benefit corporations such as protection of their overseas assets and freedom of navigation would continue to be defined as national interests. A second framework would be one in which transnational corporations either have their own well-armed and sometimes large security forces, or will hire specialized security companies or even governments looking for ways to subvert their armed forces. Glimmers of this exist already: in Africa, a corporation called Executive Outcomes, composed largely of former South African commandos, has been hired by a number of governments, and many former South African spies are forming private intelligence-gathering agencies.⁵⁷ This could be the beginning of a trend.

In a system dominated by economic warfare, military force structure, doctrine, and equipment would be designed to minimize collateral damage when used. If the objective of military operations is to acquire or defend resources and markets, the goal would obviously be to do as little damage as possible to infrastructure, plant, and equipment. Since casualties diminish potential customers, nonlethal weaponry will play a major role in military operations. The most important military missions would be information warfare against competitors and protection of informational, physical, and human assets against violence and extortion. Armed forces would range from very sophisticated and technology-reliant ones which serve rich nations or transitional entities to old-fashioned thugs serving lower-level or poorer masters. (See Figure 5.)

Economic Warfare: Strategic Issues.

In a future security system where most conflict involves the struggle for resources and markets, three strategic issues are likely to be the most important for the United States.

What is the appropriate relationship between the state and transnational corporations? In a future system where conflict arises from the struggle for resources and markets, most major

Characteristics	Strategic Issues	Military Implications
<ul style="list-style-type: none"> The major source of instability is intense, sometimes violent competition for resources and 	<ul style="list-style-type: none"> What is the appropriate relationship between the U.S. Government and transnational commercial, 	<ul style="list-style-type: none"> The U.S. military would need only a very limited capability for traditional warfighting

markets	intelligence, and	
• Transnational	security entities?	• The U.S. military
entities will	• How can the United	would focus on
develop security	States help prevent	information warfare
interests and mili-	economic competition	and information
tary capabilities	from causing political	security
separate from states	conflict?	• Nonlethal weapons
• Private security	• What is the appro-	and capabilities of
and intelligence	propriate strategy for	all kinds would
corporations will	national information	increase in signi-
play a major role	security?	ficance
in the system		
• There would be		
great pressure to		
minimize collateral		
damage and casual-		
ties when force is		
used		

Figure 5. Economic Warfare.

corporations will be transnational. It will be difficult to decide which transnational corporations are American and thus warrant the use of U.S. power resources to protect or promote. At the extreme, the whole concept of "national" security may become irrelevant if corporations become truly transnational and security is defined in economic terms. Deciding under what conditions it is appropriate to use state resources to protect a national corporation or cartel will be a vital strategic issue.

Similarly, in a system where corporations or cartels have their own power that transcends the strictly economic, the United States will have to decide what sort of relationship to have with transnational corporations or multinational cartels. Should, for instance, the United States consider signing treaties, perhaps even nonaggression pacts with powerful corporations? And, if corporations do appear to pose an actual challenge to the power of the state, should the U.S. Government pursue a strategy designed specifically to prevent the accumulation of non-economic power by corporations? And, what should U.S. policy be toward transnational security corporations (a.k.a. mercenaries) such as the highly successful Executive Outcomes composed of former South African soldiers? Clearly, if power continues to accrue to transnational corporations, the United States will have to re-think some of the basic tenets of its approach to security and world politics.

How can the United States help prevent economic competition

from spilling over into political competition or conflict? In a world where most conflict arises from the competition for resources and markets, there will be the risk that struggles between corporations could spark conflict between nations as governments rush to support "their" commercial entities. There are historic precedents for this. Conflict between European trading and colonization companies in Asia, the Americas, and, later, Africa sometimes caused European wars. In a future security system with intense corporate competition and even conflict, the United States would have to take deliberate steps to build a firewall between commercial conflict and state conflict. This would be very hard to do from a political perspective since it might entail the government of the United States rejecting an appeal for help from an American corporation.

What is the appropriate strategy for national information security? If economic competition becomes the main source of conflict in the future security system and if, as Toffler argues, the United States develops a full-fledged "information economy," then protection of national information assets might become the cornerstone of national security. Under these conditions, crafting a strategy for national information security will be extremely important. Such a strategy would have to develop broad concepts for when, where, and how national power would be used to protect information assets, and would have to be built on some visions of the desired state of national and world information assets. Already, some analysts are calling for such a strategy.⁵⁸ The more that economics and national security meld in the future, the greater the need for a coherent national information strategy.

Economic Warfare: Military Implications.

There would be only limited need for a traditional warfighting capability by the U.S. military in a security system where conflict derives from economic competition. The U.S. military would probably retain some capacity to deter states still intent on waging traditional interstate war, but this would not be the focus. Instead, the U.S. military would concentrate more on information warfare and information security, with great stress on nonlethal weapons. It is likely that the United States would develop an information corps as suggested by Martin Libicki and James A. Hazlett.⁵⁹ This might go even further and see the creation of an information security service that is either part of or affiliated with the military. One of the great challenges for the U.S. military would be to develop doctrine and techniques for operating in coalition with non-state militaries such as corporate armies or mercenary corporations. In general, though, a future security system where economic competition is the main source of conflict would probably see the smallest need for a

robust, traditional-style U.S. military.

Conclusions.

All of the future systems described here are models or heuristic devices intended to aid analysis and long-term planning. The actual future security system will undoubtedly include all types of conflict, and thus be a blend of systems. This does not mean that all forms of conflict will be of equal importance. American political leaders and national security strategists must thus reach a consensus on the priority or importance of the plausible forms of future conflict. Only when this is done can the military effectively build a program for long-term force development.

One significant fact emerges from any assessment of alternative future security systems: traditional, interstate warfighting is not an eternal function, but is system specific. It is conceivable that the global security system in place by 2030 will not be one where interstate war is a significant form of conflict. This would require an absolutely fundamental reorientation of the U.S. military. Of course, it is impossible to predict exactly what direction such a reorientation will take. Given that, there are three things that the U.S. military can and should do now to prepare for whatever future comes to pass. First, it should continue to explore information warfare, casualty-minimizing techniques, and the impact that proliferation of weapons of mass destruction will have on military operations. These things will be significant in any future security environment. Second, the U.S. military should continue to reexamine fundamental concepts and stress flexibility of organizational structure and doctrine. Third, the U.S. military must continue to pursue futurism. Currently, several studies of the long-term future have been done, each using a different methodology. These include the Air Force's *Alternative Futures for 2025*, and the *Project 2025* of the National Defense University.⁶⁰ In any form of innovative thinking, the first step is to generate new methodologies, approaches and ideas, and then to reconcile them. Military futurism is in the first stage but should soon move toward consensus (while always allowing room for creative dissent). In any case, by pursuing these three intellectual endeavors, the military can generate the conceptual raw material to make necessary changes once the future security system finally crystallizes.

ENDNOTES

1. Charles W. Taylor, *A World 2010: A New Order of Nations*, Carlisle Barracks, PA: U.S. Army War College, Strategic Studies Institute, 1992, pp. 3-4.

2. This methodology based on trends and forms of conflict is not the only one which can generate useful analysis for the American military. A very important study by the U.S. Air Force, for instance, identifies three "drivers" of the future: the American world view, "ΔT&K" which is the ability to employ technology, and the "world power grid" which "describes the general, transmission, distribution, and control of political, military, economic, or informational power." See Joseph A. Engelbrecht, *et. al.*, *Alternative Futures for 2025: Security Planning to Avoid Surprise*, a research paper presented to Air Force 2025, April 1996, pp. 10-11.

3. This concept is developed in some detail in Alvin and Heidi Toffler, *War and Anti-War: Survival at the Dawn of the 21st Century*, Boston: Little, Brown, 1993.

4. Alvin Toffler, *The Third Wave*, New York: Bantam, 1980, p. 408.

5. This concept was introduced by Alvin Toffler in *ibid.*, p. 158 and ff.

6. See Chris Morris, Janet Morris, and Thomas Baines, "Weapons of Mass Protection: Nonlethality, Information Warfare and Airpower in the Age of Chaos," *Airpower Journal*, Vol. 9, No. 1, Spring 1995, p. 27.

7. The most important analysis of the form of conflict known as cyberwar is found in Alan D. Campen, Douglas H. Dearth, and R. Thomas Goodden, eds., *Cyberwar: Security, Strategy, and Conflict in the Information Age*, Fairfax, VA: AFCEA International Press, 1996. The Internet home page of the Institute for the Advanced Study of Information Warfare defines information warfare as "the offensive and defensive use of information and information systems to exploit, corrupt, or destroy an adversary's information and information systems, while protecting one's own. Such actions are designed to achieve an advantage against an adversary in a military or business situation" (<http://www.psycom.net/iwar.1.html>, 13 February 1996). A good explanation is also available in Martin C. Libicki, *What is Information Warfare?*, Washington, DC: National Defense University Institute for National Strategic Studies, 1995. So far, though, no consensus on information warfare's strategic implications has emerged. Many analysts within the U.S. military and Department of Defense have viewed information warfare as an adjunct to conventional strikes--a force multiplier--rather than a stand-alone method of warfare. The U.S. Air Force has shown a particular interest in this. See, for instance, George J. Stein, "Information Warfare," *Airpower Journal*, Vol. 9, No. 1, Spring

1995, pp. 30-55; Edward Mann, "Desert Storm: The First Information War?" *Airpower Journal*, Vol. 8, No. 4, Winter 1994, pp. 4-14; and, Owen Jensen, "Information Warfare: Principles of Third-Wave War," *Airpower Journal*, Vol. 8, No. 4, Winter 1994, pp. 35-44. There have been a few discussions of the strategic implications of warfare as, for example, at the 1994 U.S. Air Force Roundtable on the Revolution in Military Affairs (*Report on the US Air Force Roundtable on the Revolution in Military Affairs*, McLean, VA: Science Applications International Corporation, January 1994). One of the first attempts to develop a comprehensive, strategic-level framework for information warfare is found in John Arquilla and David Rondfelt, "Cyberwar is Coming!" *Comparative Strategy*, Vol. 12, No. 2, April-June 1993, pp. 141-165; John Arquilla, "The Strategic Implications of Information Dominance," *Strategic Review*, Vol. 22, No. 3, Summer 1994, pp. 24-30; and Richard Szafranski, "Theory of Information Warfare," *Airpower Journal*, Vol. 9, No. 1, Spring 1995, pp. 56-65.

8. Jessica T. Mathews, "Power Shift," *Foreign Affairs*, Vol. 76, No. 1, January/February 1997, p. 50.

9. Martin van Creveld, *The Transformation of War*, New York: Free Press, 1991.

10. Mathews, "Power Shift," p. 51.

11. Robert David Steele, "Private Enterprise Intelligence: Its Potential Contribution to National Security," *Intelligence and National Security*, Vol. 10, No. 4, October 1995, p. 211.

12. Mathews, "Power Shift," pp. 65-66.

13. Mary H. Cooper, "Population Growth," *CQ Researcher*, Vol. 3, No. 26, July 16, 1993, p. 603.

14. Ronald D. Lee, "Long-Run Global Population Forecasts: A Critical Appraisal," in Kingsley Davis and Mikail S. Bernstam, eds., *Resources, Environment, and Population: Present Knowledge, Future Options*, New York: Oxford University Press, 1991, p. 44.

15. Julian L. Simon, *Population Matters: People, Resources, Environment, and Immigration*, New Brunswick, NJ: Transaction, 1990, p. 190.

16. See *Ibid.*, and George D. Moffet, *Critical Masses: The Global Population Challenge*, New York: Penguin, 1994.

17. Thomas F. Homer-Dixon, "On the Threshold: Environmental Changes as Causes of Acute Conflict," *International Security*, Vol. 16, No. 2, Fall 1991, pp. 76-116.

18. Robert D. Kaplan, *The Ends of the Earth: A Journey at the Dawn of the 21st Century*, New York: Random House, 1996, p. 117.

19. "Growing Urbanisation Increasing Poverty, U.N. Says," PanAfrican New Agency, electronic newswire, October 20, 1996.

20. Data is from the World Resources Institute, Washington, DC, from 1994, reprinted in Peter Gizewski and Thomas Homer-Dixon, "Urban Growth and Violence: Will the Future Resemble the Past?" Occasional Paper of the Project on Environment, Population and Security, University of Toronto, June 1995, Appendix A.

21. Ira S. Lowry, "World Urbanization in Perspective," in Davis and Bernstam eds., *Resources, Environment, and Population*, p. 162.

22. See Howard W. French, "Booming City, Flush With Rats and Dying Children," *New York Times*, September 30, 1996, p. A4.

23. Ralph Peters, "Our Soldiers, Their Cities," *Parameters*, Vol. 26, No. 1, Spring 1996, p. 43.

24. For example, Internet site <http://www.wic.net/colonel/index5.htm>, accessed September 23, 1996, tells of a meeting between President Eisenhower and space aliens. Information supporting the "military movement" can be found at Internet site <http://www.apex.net/users/patriot/>, accessed September 23, 1996; material opposed to it is at <http://www.sff.net/people/pitman/militia.htm>, accessed September 23, 1996. While the militia movement and the array of conspiracy-theory groups, including those dealing with UFOs, are not necessarily interlinked, they are both manifestations of the same psychological phenomena.

25. Bruce Hoffman, "Intelligence and Terrorism: Emerging Threats and New Security Challenges in the Post-Cold War Era," *Intelligence and National Security*, Vol. 11, No. 2, April 1996, p. 215.

26. Sean P. Eagan, "From Spikes to Bombs: The Rise of Eco-Terrorism," *Studies in Conflict and Terrorism*, Vol. 19, No. 1, January-March 1996, p. 1.

27. Martha F. Lee, "Violence and the Environment: The Case of 'Earth First!'," *Terrorism and Political Violence*, Vol. 7, No. 3, Autumn 1995, pp. 113-116.

28. Edward N. Luttwak, "The Shape of Things to Come," *Commentary*, June 1990, p. 25.

29. On this, see Steven Metz and James Kievit, *Strategy and the Revolution in Military Affairs: From Theory to Policy*, Carlisle Barracks, PA: U.S. Army War College, Strategic Studies Institute, 1995.

30. *Defence in a Democracy*, draft white paper on national defence for the Republic of South Africa, June 21, 1995, chapter 2.

31. There is a large literature in political science on the dynamics of state-based systems. Classic studies include Hans J. Morgenthau, *Politics Among Nations: The Struggle for Power and Peace*, 6th edition, New York: Alfred A. Knopf, 1985; and Hedely Bull, *The Anarchical Society: A Study of Order in World Politics*, New York: Columbia University Press, 1977.

32. For magisterial studies of the role of diplomacy in a state-based system, see Henry A. Kissinger, *A World Restored: Metternich, Castlereagh and the Problems of Peace 1812-1822*, Boston: Houghton Mifflin, n.d., and, *idem.*, *Diplomacy*, New York: Touchstone, 1994.

33. For instance, in the period between Waterloo and the beginning of World War I, the most costly wars in the world included the American Civil War and the Taiping Rebellion in China which took an estimated 20 to 30 millions lives.

34. See Edward Vose Gulick, *Europe's Classical Balance of Power*, Ithaca, NY: Cornell University Press, 1955.

35. During talks on U.S. national security strategy to audiences in Latin America, I have found that simply translating the phrase "engagement and enlargement" into Spanish causes much concern on the part of the audience and, instead, I begin with a fairly lengthy explanation of what policymakers mean by the terms and then leave them untranslated on any briefing slides.

36. Pericles' Funeral Oration in Thucydides, *The Peloponnesian War*, trans. Rex Warner, New York: Penguin, 1954, p. 147.

37. William J. Clinton, *A National Security Strategy of Engagement and Enlargement*, Washington, DC: The White House, February 1996, p. iii.

38. This is certainly not a new problem. From the beginning of the Cold War, writers like Walter Lippmann warned of strategic overextension in 1947. (*The Cold War: A Study in U.S. Foreign Policy*, New York: Harper, 1947.) As the United States reassessed its world role after the collapse of the Soviet Union, analysts

like David C. Hendrickson and Robert W. Tucker raised the issue. (*The Imperial Temptation: The New World Order and America's Purpose*, New York: Council on Foreign Relations Press, 1992).

39. Robert A. Pastor, "The Latin American Option," *Foreign Policy*, No. 88, Fall 1992, pp. 107-125.

40. Walter Laqueur, "Postmodern Terrorism," *Foreign Affairs*, Vol. 75, No. 5, September/October 1996, p. 35.

41. For example, Immanuel M. Wallerstein, *Geopolitics and Geoculture: Essays on the Changing World-System*, Cambridge: Cambridge University Press, 1991.

42. Developing a consensus on the level of acceptable risk is a complex but vital part of any coherent strategy. See Steven Metz, "Analyzing Strategic and Operational Risk," *Military Review*, November 1991, pp. 78-80.

43. John M. Shalikashvili, *Joint Vision 2010*, Washington, DC: The Joint Staff, 1996, p. 9.

44. See, for instance, Stuart E. Johnson and Martin C. Libicki, *Dominant Battlespace Knowledge: The Winning Edge*, Washington, DC: National Defense University Press, 1995; Martin C. Libicki, *The Mesh and the Net: Speculations on Armed Conflict in a Time of Free Silicon*, Washington, DC: National Defense University Press, 1994; and, Barry R. Schneider and Lawrence E. Grinter, eds., *Battlefield of the Future: 21st Century Warfare Issues*, Maxwell AFB, AL: Air University Press, 1995. For a theoretical and historical perspective on the revolution in military affairs, see Steven Metz and James Kievit, *Strategy and the Revolution in Military Affairs: From Theory to Policy*, Carlisle Barracks, PA: U.S. Army War College, Strategic Studies Institute, 1995.

45. On nanotechnology, see Charles Ostman, "Nanotechnology: The Next Revolution," *21st Century Online Magazine*, <http://www.21net.com/online/nano.htm>.

46. Brian Nichiporuk and Carl H. Builder, *Information Technologies and the Future of Land Warfare*, Santa Monica, CA: RAND Corporation, Arroyo Center, 1995, pp. 64-67.

47. Daniel Bell, *The End of Ideology: On the Exhaustion of Political Ideas in the Fifties*, New York: Free Press, 1962; Francis Fukayama, *Have We Reached the End of History?*, Santa Monica, CA: RAND Corporation, 1989.

48. Samuel P. Huntington, "The Clash of Civilizations?" *Foreign Affairs*, Vol. 72, No. 3, Summer 1993, pp. 22-49.

49. Elisabeth Siddiqui, "A Brief History of Islam in the United States," <http://www.colostate.edu/Orgs/MSA/docs/iaa.html>, accessed September 20, 1996, p. 1.

50. For details, see Steven Metz, "To Insure Domestic Tranquility: Terrorism and the Price of Global Engagement," in Stephen C. Pelletiere, ed., *Terrorism: National Security and the Home Front*, Carlisle Barracks, PA: U.S. Army War College, Strategic Studies Institute, 1995.

51. The concept of "total strategy" within the context of ideological struggle was developed by the French general Andre Beaufre. See *An Introduction to Strategy*, New York: Frederick A. Praeger, 1965.

52. For instance, Ralph Peters, "The Culture of Future Conflict," *Parameters*, Vol. 25, No. 4, Winter 1995-96, pp. 18-27; and Martin van Creveld, *The Transformation of War*, New York: Free Press, 1991.

53. See Daniel Pipes and Adam Garfinkle, eds., *Friendly Tyrants: An American Dilemma*, London: Macmillan, 1991.

54. John F. Sopko, "The Changing Proliferation Threat," *Foreign Policy*, No. 105, Winter 1996-97, pp. 5-6.

55. For details, see Steven Metz and James Kievit, *The Revolution in Military Affairs and Conflict Short of War*, Carlisle Barracks, PA: U.S. Army War College, Strategic Studies Institute, 1994.

56. Edward N. Luttwak, "From Geopolitics to Geo-Economics: Logic of Conflict, Grammar of Commerce," *The National Interest*, No. 20, Summer 1990, pp. 17-24; and *idem.*, *The Endangered American Dream*, New York: Simon and Schuster, 1993. Luttwak first developed the notion of the "paradoxical logic of conflict" in *Strategy: The Logic of War and Peace*, Cambridge, MA: Belknap, 1987.

57. "Private Intelligence-Gathering Companies Increase," *Financial Mail* (Johannesburg), January 17, 1997, reprinted in *Foreign Broadcast Information Service (FBIS)-AFR-97-011*, January 17, 1997 (electronic edition).

58. For instance, Winn Schwartz, *Information Warfare: Chaos on the Electronic Superhighway*, New York: Thunder's Mouth Press, 1994.

59. Martin Libicki and James A. Hazlett, "Do We Need an Information Corps?" *Joint Force Quarterly*, Autumn 1993, pp. 88-

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60. Engelbrecht, *et al.*, *Alternative Futures for 2025*; Alvin H. Bernstein, *et al.*, *Project 2025*, Washington, DC: National Defense University, Institute for National Strategic Studies, 1991.

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