

# “Visioning for the 21<sup>st</sup> Century: A Process for National Security”

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## Executive Summary

This paper, “Visioning for the 21<sup>st</sup> Century: A Process for National Security” explores a vision of *how* the broad, systemic relationships in the National Security community need to work together. It further explains why visioning needs to be accomplished holistically. The future global geopolitical environment and internal environment in the United States need to be effectively “shaped.” In addition, a new role for the U.S. in the world of the 21<sup>st</sup> Century needs to be developed. These ideas will be examined in this paper.

## Introduction

National Security cannot be looked at as “Parts of a Puzzle.” As a systems scientist, I am trained to step back into the next larger system and look at the whole, to look at the interdependence of the parts and the links that relate each part of the system to each other.

“Systems are not the sum of their parts, but the product of their interactions,” according to systems theorist Dr. Russell Ackoff in his book *The Democratic Corporation*.<sup>1</sup> To understand a system, you do not break it down into its component parts, you do not look at the pieces of the puzzle, you must look at the entire mosaic that is created when the pieces fit together. And, you only see the mosaic in the next larger system.

If the system we are looking at is the National Security Strategy, what is the next larger system? Well, ideally, it should be the holistic, integrated National Strategy of the United States; its foreign policy, economic, diplomatic, military, intelligence, education, health, etc... all of its policies, woven together to create a holistic vision of who we are in the future. Unfortunately, we do not have such a strategy or vision -- nor do we have any mechanism to develop one anywhere within the federal government. We simply do not have a decision making process to develop a long term integrated vision of American involvement and strategies in the world or our strategies at home. How can we possibly be effective at shaping our environment, or developing effective plans for shaping, if we have no way to think through the whole, let alone, make decisions about the world. *Can the United States continue to be a world leader if it is always in a reactive mode and never proactive?*

I think our current national decision making structure is inadequate and antiquated for the world we are inheriting in the Post Cold War 21<sup>st</sup> Century.

There will be little ability to secure our homeland, and even less ability to protect American interests around the world, if the world remains in this current state of instability. And, I do not believe that state will improve without American leadership. But, that leadership requires a holistic, integrated and, most likely interagency planning and decision-making apparatus that today simply does not exist.

I have traditionally worked with some of our nation's largest firms, AT&T, General Motors and Ford Motor Company. What is astonishing to me is that each of those organizations, and many others I have been involved with, have what I would call an integrated decision making process that produces an integrated global strategic plan - region by region, country by country, market by market.

Although none of these companies have to deal with any issue as complex as global security or the large scale societal collapse we are viewing in so many areas of the world, the models they use to integrate decision making and develop their plans might nevertheless be helpful. General Motors does business in one form or another in virtually every nation on the planet. A National Security Strategy is on the same scale, though, its execution, I grant you, is far more complex.

Now, General Motors is not a representative democracy, but, in the last decade they have made great strides toward developing processes to listen to their constituents, if you will, their stakeholders, and integrating that input into their global strategies. Having GM listen to their stakeholders to develop their global strategies and having the American government listen to its constituents with the aim of developing global strategy may seem like apples and oranges. But, I think they have more potential similarities than differences. And, more importantly, GM is not the only company with processes like this.

One of the most important elements of the corporate process is the development of a joint vision, which represents multiple stakeholders. And, DoD has *some* experience in the development of joint visions.

I do not want you to get the impression that I want to reinvent government. I do not want to change the Constitution or the Bill of Rights. But, our Founding Fathers could not have foreseen the creation by Congress of more than 200 agencies and departments of the federal government - each of which has a unique mission and has been created in isolation from the others. Each of these agencies should be contributing to the National agenda. They certainly represent the elements of national power.

We may want to use the *National Security Strategy* development and execution to more effectively develop the integrative mechanisms and formal interagency processes and doctrine that we will need to ultimately develop our National Strategy. Is it backwards?

Yes, to a systems scientist, but the two strategies could co-evolve. And, National Security is so much broader than we view it at DoD, that we may learn a lot in the process.

We might want to begin by asking each department and agency of the federal government to describe how they support the National Strategy. We should also ask if they support the *National Security Strategy*, and, if so, how.

Today, I also want to explore how a visioning process could be useful for the National Security community in developing their plans for accomplishing the National Security mission of the United States and its need to engage in shaping the world to accomplish this mission. As a nation, we need a vision of what role we want to play in the world for this new century and how we will improve the security, not only of our homeland, but the world, and American interests in it. There will be no security at home, and there will be no protecting American interests around the world, if the world is in turmoil.

With the fall of the Berlin Wall, the crumbling infrastructure of the former Soviet Union, along with its associated political, economic and social deterioration, with the increasing pace of change and technology which are leading the planet beyond Alvin Toffler's "Third Wave,"<sup>2</sup> and the globalization of the world economy, the stable bi-polar world of the Cold War has changed forever. These changes include an American will to limit the resources available for defense in spite of the need to increase its capabilities. Instead of a global "peace dividend," the people of the world have inherited an increasingly complex, unstable, even chaotic place to live, with less predictability than ever before.

As a systems scientist, I think that in order to develop a vision for the future, any entity needs to examine the larger system that it is a part of. DoD is a part of the National Security system of the nation. In this world, the need to define the changing role that DoD should play is critical to preserving our nation's security, and its role in the world. If we are to be successful at improving the protection of Americans and American interests, we will need to improve our efforts to "shape" the world. Shaping, after all, is a form of influencing events in your favor. But, to know what you want to influence, it is imperative that you have thought through a vision of what role you want to play, first.

Influence, in the 21<sup>st</sup> Century will not be a "U.S. centric" only consideration, but must consider impacts worldwide. In our representative democracy, the idea of defining a new role for the nation needs to be openly discussed and debated.

Defense is a key, but not the only component of National Security. The Department of Defense has a *National Military Strategy* that supports the *National Security Strategy of the United States*. The future of National Security will depend on a formal interagency process that will need to be developed in much more detail than it currently is configured. And, *The National Security Strategy of the United States*, published annually needs to become more than a political philosophy or policy wish list. It must become a viable strategic, operational and tactical reality. And, that will require interagency planning,

process, doctrine and vision.

National Security and the global security of the rest of the world will depend upon the role DoD will play in this process. What role, then, should they play?

Our military forces will be expected to function well along the entire war-peace spectrum of contingencies and operations other than war. We know that many of tomorrow's challenges and opportunities will be precisely because of the amount of continuous change and uncertainty in the world. We also know that there will be many different venues for conflict from deep space to cyber space, from urban areas to deep underground, and within the U.S. homeland as well as around the world.

There will also be challenges with transnational concerns that involve intertwined economies, mass migration, drug trade, organized crime and the environment. The information age will reduce the timelines to react or recover, with instant worldwide communications, information access and advanced technologies. Our fanatical adversaries from rouge states, terrorist groups and non-state actors will attack us in asymmetric ways using their strengths against our weaknesses using whatever is at their disposal from high technology information warfare, to weapons of mass destruction.

“Traditional” warlike conflicts will be reduced and replaced with far more difficult to defend conflicts. And, no matter what kind of conflicts we are engaged in, we will rarely be acting alone. Most of the time, we will be working in concert with additional partners:

- other government agencies, in an inter-agency mode
- allies
- coalitions
- adhoc partners
- non-government organizations, such as global corporations, and
- international organizations, such as the Red Cross.

We will be most effective if we are shaping the future. But, how do we shape? Only through preparedness and shaping can a stable world emerge. This will ultimately rely upon cooperative security arrangements around the world based on mutual trust and collective planning. But, when this fails, we must be able to be ready, capable, and agile enough to fight and win the nations wars, whatever they may look like.

These issues are not only the purview of the military. They are the responsibility of the entire National Security community -- and that community is very broad. Yet, it is that broad community that needs to develop a vision of the future. Once we have a vision, we will need to think about *how* to shape the future of the world. We will need a global strategy; region by region, country by country, including our own.

Internally, there needs to be a mechanism to bring the diverse agencies involved in National Security together to develop a joint vision and a plan to carry it out. In fact, if a

formal interagency process is not voluntarily developed, there is a chance that it will be imposed by Congress in legislation that will “force” agencies to work together, not unlike the Goldwater-Nichols Act, which forced the jointness activities between the services. But, there is a strong possibility that the legislation may not be developed by someone as wise as the Honorable James R. Locher III, whose genius enabled the Goldwater-Nichols Act to be successful.

After personally experiencing the divestiture and reorganization of the old Bell System and the telecommunications industry in this country, I firmly believe that to create the rules of play is far superior to having those rules imposed upon you by those who may not understand all the fundamental functions. And, yet, this is exactly what could happen if the federal agencies involved in National Security can not learn how to develop effective formal processes to integrate the diverse elements of National Security; potentially to develop interagency doctrine, strategic, operating, and tactical plans.

After World War II, General George C. Marshall said,

“We are now concerned with the peace of the entire world.  
And the peace can only be maintained by the strong.”

These words were never more true. But, what does it mean for the United States to be strong in the 21<sup>st</sup> Century? The National Security community must be thought of from a “systems” perspective in order to enable the United States to be strong and secure. Systems have interdependent and interconnected elements, and the National Security community, as a system, does too.

If we were to develop a vision of National Security to prepare for shaping our environments, what might some preliminary assumptions look like?

- The world is a system. In a system, every element is interdependent with every other element and the system is only as strong as its weakest link.
- The United States has global interests. Its National Security community includes the political, military, economic, diplomatic, criminal justice and other communities inside the government and outside of the government, such as NGOs, global businesses, other governments and so on.
- National Security also depends upon the education of future generations, at home and around the world.
- Conflict anywhere on the planet can negatively affect the world anywhere, because the world is a system. Therefore, our interests may require U.S. involvement anywhere to deter, reduce or eliminate conflict.
- The process of deterrence, management and reduction of conflicts throughout the

world is a value of the United States. Promotion of peace, another value, requires active shaping; in order to prevent, reduce and manage conflict, including post conflict maintenance processes. These are all systemic and they are expensive, but, cost effective in the long run.

- The “rule of law” and principles of good governance are values of the United States and need to be articulated and promoted.
- Peace can only be maintained by the strong, but the National Will will not necessarily provide many more resources to the defense community, especially without an understanding of the realities of the dangers in the world since the end of the Cold War.

An important element emerging from a visioning process may be the understanding that peace prospects and root causes of conflicts are complex and systemic. They require a thorough understanding of the system relationships between elements of a society that can lead to conflict, if not in balance. This may lead to activities to promote peaceful futures through *prevention* on a global basis. That will be the essence of shaping. Prevention is far less costly in dollars and lives than any conflict.

What might a visioning process entail? An interagency group needs to be configured to develop the vision and must have representation from the many agencies who play major roles in the National Security of the country, including the Pentagon, such as the State Department, Commerce, the FBI, the CIA, FEMA and so on. Once assembled, the process should begin by asking what the National Security community looks like as a “system” in the current time frame. It is a way to examine what it exists to do, what its core competencies are, and what it considers success.

The vision, itself, should be a description of what we want the future state to be and the role that the United States National Security community wants to play in that future state; what it will exist to do and what its core competencies will need to be in that future.

The vision is then developed by looking into the future and deciding what the “system” should look like in an idealistic, but realistic future, including *a determination of what the geo-political realities of the world could be if we are actively shaping it. This may include increased roles for the intelligence community in a post Cold War era that more effectively monitor the dangerous world that has emerged.*

Assumptions are made by identifying trends, considering the unknowable, and developing a wide range of alternative futures. This helps us to think through potential roles that the community will need to play in the various future states. This is important because strategies for action to try and “shape” the desired future become a regular part of the on-going plan.

A vision cannot be established by edict, or by exercise of power or coercion. It is more

an act of persuasion, of creating an enthusiastic and dedicated commitment to a vision because it is right for the times, right for the system and the people who are working in it, and right for the world.

Visions are descriptions of the “state of being” in the future with regard to a system’s stakeholders. A vision will account for uncertainties. It will look at its stakeholders, such as government partners, other departments and government agencies, internal and external customers, employees, suppliers, the general public, the press, Congress, The White House, and so on... One question to be answered is “what will National Security mean in the eyes of these stakeholders?”

Another question is, what does all this mean for DoD? This is the responsibility of the National Security Council, is it not? Well, yes, it is, and no, it is not, depending on how you look at it. The National Security Council has little infrastructure of its own. *The National Security Strategy of the United States* cannot be realized without the *National Military Strategy* and the infrastructure that supports it. In fact, it is the major apparatus of how the country carries out its National Security Strategy. So the weaknesses inside DoD need to be addressed.

In DoD, most current management processes still involve a focus on traditional, rigid and cumbersome DoD functional concerns, such as force structure, readiness, modernization, and sustainment. This was demonstrated in the Quadrennial Defense Review, and observed in the General Accounting Office review, where they found that integration of these rigid stovepipes is nearly impossible.

The management processes have long cycle times and the information systems are antiquated in many cases. There are too many gaps and overlapping responsibilities and authorities between JCS, the Services and the Defense Agencies, in addition to being impaired by day to day in-box crises which foster a reactive, not proactive work environment. External interactions are not fully integrated with federal departments, and with allies and other partners. The issue is, without a strong vision, can disparate activities be coherently pulled together into a cohesive whole? There is a unified need for a long-range focus, which will include 21<sup>st</sup> Century needs such as immediate turnaround, agility, responsiveness and so on. *Joint Vision 2010* is a step in the right direction.

If the Pentagon, which has a strong vision and strong visionary leadership has such problems, how are we going to deal with the National Security community, which has no strong vision, and no strong visionary leadership? How are we going to be successful at crafting such a vision when it requires the integration and holistic approach of so many bureaucracies and agencies of the federal government, each of which has a separate mission?

The sovereignty and security of the United States, and the protection of its citizens and property around the world remains the bedrock of U.S. National Security. The execution

of U.S. National Security strategy is conducted in a highly volatile global environment characterized by quantum changes in technology, unprecedented economic and political interdependencies, broadened opportunities to foster democratic principles, and allegiances, and alliances frequently founded on interests other than traditional nationalism. DoD needs to be agile enough to respond effectively to a broad range of deterrent challenges, while maintaining the ability to wage and win wars when necessary.

The country needs to define its role in the world for this new century. It needs to refine the shaping policies around the global geopolitical situation, and think through a long term foreign policy. As these emerge, the National Security strategy for the 21<sup>st</sup> Century will co-evolve with all of these efforts. Ideally, they will all be done in a holistic environment that makes sense for the people of the country.

The mission of the Department of Defense needs to more clearly reflect 21<sup>st</sup> Century challenges and better support the National Security of the United States by:

- preventing conflict and deterring potential adversaries,
- supporting worldwide stability,
- maintaining ready forces for employment worldwide,
- responding to threats and protecting U.S. citizens, property and interests,
- responding to domestic emergencies and humanitarian assistance abroad,
- contributing to other National priorities, and foreign policy

through cooperation with allies, friends, and other federal and state agencies.

The mission describes what the Department of Defense is striving for today. The vision must describe what the Department of Defense should become in this new century in a National Security context.

What might such a vision look like?

The vision of the U.S. Department of Defense beyond 2015 might become to support the National Security of the United States and its military, diplomatic, political, economic, social, technological, foreign and domestic policy efforts in the 21<sup>st</sup> Century by being able to:

- remain premier in its capacity to prevent, deter, and win the nation's wars, worldwide, quickly and decisively in concert with its allies and friends or unilaterally, with minimum casualties,
- leverage national assets wherever they are to support national interests, competitiveness, sustainability and capabilities,
- employ superior human resources in both the military and civilian workforce,



- be proactive and work closely and effectively with other Federal and State agencies and others to meet dynamic National Security priorities in support of domestic needs and global contingencies,
- be foremost in innovative practices in all areas; leveraging of U.S. core competencies; and efficient stewardship of all resources and capabilities through partnerships with industry and academia, to renew the nation's infrastructure while enhancing the overall National Security posture, and
- be the world leader in information dominance and technological superiority.

Visions usually also describe the values of the enterprise, and its overall system, suggesting that the values of the American People must reflect the values of the Department. Those values will include a culture in DoD which will: empower people, reward innovation, encourage teamwork, enhance individual skills, leverage core competencies, provide a safe and healthy workplace, employ contemporary management practices, and instill commitment to excellence.

Ultimately, the vision of the Department of Defense will need “to provide for the common defense while supporting the *National Security Strategy of the United States*.”

The vision of the National Security community may become “to work toward a world of democracy, freedom, stability, prosperity and peace in a 21<sup>st</sup> Century world which should be shaped to our advantage and which supports our national values.”

## A Definition of National Security from the View of a Systems Scientist

National Security includes the strength of our nation's infrastructure; the foundation upon which the continuous growth of our society depends. This includes its strong societal and moral codes, the rule of law, stable government and political institutions. Also included are schools and educational programs to ensure a knowledgeable citizenry and life-long learning. National Security also requires a healthy market based economy, with a strong industrial base of globally competitive industries that continuously improve their quality and productivity, and produce jobs.

Infrastructure also includes power plants, roads, sewers, ports, banks, telecommunications, housing, hospitals and health-care, a powerful military, environmental sustainability and so on. All of these are elements of infrastructure and National Security. They must be sound and secure for a nation to be strong. In addition, though rarely included, is knowledgeable leadership, in the private and public sectors, that has the will to improve and continuously learn about its obligations, and apply these lessons to their work and their life. Leadership needs to respect the knowledge and potential of the people. In the United States, this includes taking maximum advantage of the diversity of the population, and creating environments where all people can learn, grow, and make contributions to society according to their abilities.

What is National Security if seen in its broadest "systems" view? In exploring this issue, we will simultaneously explore the issues surrounding the question, "what makes a nation strong?" because these two concepts, National Security, and national strength are highly related. And, they are related to the ideas of infrastructure, knowledge, capability and an ability to learn as a society.

In *Evolving U.S. Strategy for Latin America and the Caribbean*,<sup>3</sup> edited by L. Erik Kjonnerod, several different papers provide guidelines to assist in the development of the nations described. Although the guidelines are meant to help in Latin American countries, I believe they are equally applicable in most developing nations of the world, and they are a lesson in systems thinking. Lieutenant General H.J. Hatch, in the Kjonnerod book, writes on "Security, Stability, Sustainability: Conditions for Peace." He says,

“. . .the United States should be cooperating with the governments of Latin American nations. . . These nations need effective public and private institutions to meet the basic needs of their citizens. A component of many of these institutions is the infrastructure essential for economic development. . . Economic development is, in large measure, based on the existence of adequate infrastructure. Infrastructure opens the door to productivity, economic opportunity, and a higher standard of living. The lack of infrastructure contributes to uneven and inadequate economic growth, which, in turn, contributes to political instability.”

Dr. W. Edwards Deming, the great American statistician and philosopher, would say, “a system must have an aim” to be a system.<sup>4</sup> What is the aim of the United States? Perhaps, we could say, “life, liberty, and the pursuit of happiness,” within the system framework of maintaining the Constitution, the Bill of Rights, and providing for a common defense. Of course, another system constraint includes a finite amount of tax dollars and globally competitive capital for free market growth, with which to build the infrastructure and, in addition, the knowledgeable people essential for a society to have effective leadership.

### Military Security is an Element of National Security

Military security is a major element of National Security. What then, is the Defense Community’s role in National Security? We have historically asked our Defense Community to be the caretaker of National Security on behalf of the country. But, this role will be inappropriate for the 21<sup>st</sup> Century when the role of National Security must be broader than a pure military one and require coordination and cooperation with other agencies to serve the nation's future capabilities.

National Security is a systemic issue. It goes to the very core of how we define who we are as a people, and a part of a free society. It also helps us to define our infrastructure as a society. It also concerns how we view our world responsibilities. In addition to an aim, all social systems must also define a set of values. Values are an integral part of a nation's infrastructure. One of the values of the United States is the rights of the individual outlined in the Bill of Rights. Human values and rights, and respect for the individual are at the core of our Bill of Rights and the aim of democracy around the world.

It is crucial that core values are articulated and lived by, in order to help the individuals in a system understand the system’s expectations of them. A system, especially a nation, needs core values that are articulated and held up for world view, scrutiny and commentary. In many respects, the U.S. Declaration of Independence was our country’s first attempt to define the core values of our nation. And, those values have had a positive and profound impact on the world since their publication in 1776.

### Economic Security is an Element of National Security

Economic security is another major element of National Security, even as borders are less important than ever. National Security can then be thought of as the ability to ensure the safety, security, and well being of our borders, citizens and economic viability. If we are using the broadest definition of National Security, then there can be no question of the need to include the economic viability of our nation. Without capital, there is no business, without business, there is no profit, and without profit, there are no jobs.

The viability of a nation’s industrial infrastructure, which provides jobs for the people of a nation, which creates and distributes wealth, and which leverages profits, is essential.

Without jobs, people and the quality of their lives deteriorate to a point where hunger leads to the disintegration of the society and community, at large. It also leads to strife on many different levels. This is especially true in third world areas, many of which, are threats to National Security and global stability. The global community cannot sustain indefinitely whole populations of “haves” and “have nots.”

In the Kjonnerod book, Lowenthal and Hakim describe four criteria needed, “for democratic institutions to take firm root and flourish. . .”<sup>5</sup>

“First, the region’s remaining internal wars must be ended. Democratic politics cannot thrive in settings where civil strife divides societies, expands the role of armies, retards economic progress, and produces gross human rights abuses. Second, the armed forces must be more effectively subordinated to the political control of civilian governments... Third, countries (must) curtail pervasive abuses of human rights. Democratic practice and the rule of law cannot be consolidated unless the rights of political dissidents, minorities, and other vulnerable groups are respected and protected. Finally, nations must make every effort to establish and sustain economic programs that can renew investment, improve productivity, and create opportunities for disadvantaged groups. Democratic institutions cannot thrive under conditions of prolonged economic hardship - when millions of citizens are without jobs, adequate shelter and nutrition, basic education, or much hope for the future.”

Solutions to these problems only come from systemic approaches.

There is no question that a part of the infrastructure of a nation must include a sound economy. It was the relative deterioration of the Japanese economy that led that nation into World War II. Poverty around the world is a global systemic issue that frequently can and does lead to political instability. It, therefore, follows that one important way to secure peace around the world is to ensure prosperity and a high quality of life. Economic stability, however, is not ordinarily considered the purview of the military. Indeed, it is not. But, in a broad definition of National Security, the military may or may not need to play a role to help integrate the many “voices” that come together to define a nation's security. *The National Security community may need a new infrastructure inter-agency to do this integration function.*

Lester Thurow, in his book, *Head to Head*,<sup>6</sup> says,

“ . . .military power does not lead to economic power. Quite the reverse, if a country is to be a military superpower (that is, use up a lot of human and economic resources on military activities - a form of public consumption), it must be willing to be self disciplined enough to cut its private consumption to levels that insure it is not cutting back on the investments needed to keep civilian productivity growing. Spartan self-discipline is necessary if a country is to have both sustainable military and economic superpower status. An economic superpower must make large investments in civilian research and development (R&D), plant and equipment, public infrastructure, and human

skills to remain an economic superpower. A military superpower must make large investments in military R&D, military equipment, military infrastructure, and military training to remain a military superpower. If a nation wishes to be both, it must make both sorts of investments. . .”

So, if the United States wishes to be both, in order to be strong, the American people need to understand the complexities of this situation, the nature of infrastructure in our nation as well as nations around the world, and the relationships between the economy and the military.

In a book called *Selling our Security*,<sup>7</sup> by Martin and Susan Tolchin, the authors are concerned that many strategic industries in the United States are now in foreign hands and that National Security has been jeopardized by the fact that U.S. policy does not take a broad enough view. They ask how National Security should be defined. They want to know if “the President should have the authority to block only those foreign acquisitions that imperil military security, involving companies with defense contracts? Or (should) National Security encompass companies that produce technologies critical to the nations economic development, technologies needed to assure that the United States remain economically competitive in the twenty-first century?”

I believe these are not insignificant questions. Can National Security and the relationship to the economic viability of an industry be defined *only* within market forces? It seems to me that there is no clear answer when industries are no longer competitive. But, there is an obligation to the country to become and remain competitive, so the industry is not lost. Nevertheless, industry leadership frequently does not know how. In addition, they are used to responding to the "voice" of the customer, and the “voice” of Wall Street, but there is no “voice” calling to them, called “your responsibility for National Security.”

There are also examples, where entrepreneurial companies have tried to find venture capital for their new technological developments in the United States, and when they could not, they turned to foreign venture capital, and the U.S. lost its rights to the new technologies.

As a nation, we have not paid enough attention to industries whose futures are critical to the industrial strength of the country. Some of this is because, historically, the U.S. has not believed in a U.S. National Industrial Policy. We only believe in free market forces. The nation has been competing against other nations, however, who do believe in industrial policies, and therefore, through lack of both knowledge and policy, we have lost whole industries, such as VCR’s and television sets, and almost lost the strategic industries of machine tools and automobiles. This kind of non-systemic thinking can lead to weaknesses in National Security.

### Societal Health is an Element of National Security

There are some other fundamentals that we need to talk about relating to the general well

being of a population. Without a strong educational component in a society, and an environment that values knowledge and critical thinkers, there is little hope for that society to grow and develop. There is certainly no hope that it can sustain leadership in a global sense. Education is a foundation for which there is no substitute; whether that education takes place in a traditional way, or on the factory floor. Literacy, and in today's world, technological literacy, as well, is essential to survival in the twenty-first century.

It also goes without saying that health care and nourishment must be available to a population from conception until death. Because the greatest asset a community has is its people, and the knowledge in their heads, it is crucial that the investments made in that knowledge give the community a "return" for its investment. Without healthy people, the returns will be poor. This is especially true in impoverished nations, where children, normally seen as the future, are so malnourished, they cannot develop their physical bodies or intellectual capabilities in a normal way.

### Economic Environmental Sustainability is Another Element of National Security

National Security also requires an economic system that is environmentally sustainable. This is especially difficult for third world nations, who use up their natural resources to sustain current populations, at the expense of their future and the future of the world. As the global population continues to climb, and third world nations struggle to increase the quality of life in their countries, the issues of economic and environmental sustainability are essential to understand. An example closer to home. If the world faces another oil crisis, and many experts believe it could be within ten years, where are the alternative fuel vehicles and their infrastructures? Will the world be ready? Are the infrastructures being invested in and on what scale? Will the effects of congested areas of the world be eliminated, or reduced?

Paul Hawken, in his book *The Ecology of Commerce*,<sup>8</sup> says,

"We are seeing increases in population while decreasing the carrying capacity of our ecosystems. . . . By accepting damage to the environment in order to increase our capacity, whether it is our own skies and rivers, or the forests of the Amazon basin, we face an ultimate reckoning between these two opposing principles.

"We may have already surpassed the point at which we can sustainably support the world's population using present standards of production and consumption. The disturbing possibility should impel us to seek, as sensibly and quickly as possible, an integration of our wants and needs as expressed and served by commerce, with the "capacity of the earth, water, forests, and fields to meet them."

Hawken proposes three solutions to fundamentally change the economic and environmental infrastructure of the world. They are not complex ideas, yet, if embraced, could increase the global security of our world. As a community, we have hardly begun

the study of this area. Yet, it is the ultimate in global systems thinking, and we need to better understand the ideas of sustainability, both economic and environmental, and their relationship to our National Security as well as the security of the world. In fact, global organizations, such as the United Nations, along with the leadership of global corporations will need to cooperatively and systematically work together with governments around the world to make this a reality.

What is National Security? The Fusion of Diplomacy and Military Operations?

What is National Security? In *C<sup>3</sup>I, Issues of Command and Control*,<sup>9</sup> Edited by Thomas P. Coakley, and written by Rodney B. McDaniel, on the history of the National Security Act, he writes,

“The National Security Act was written in 1947. It was the final congressional output of . . . the lessons of World War II. It was thought that the services didn’t cooperate with each other very well, so the way to fix that was to put the . . . services under a common thread. . . and establish the National Security Council, as a mechanism to integrate domestic, military, and foreign policy, to effectuate the overall national good. . . National Security policy, then, is the integration or the fusion of diplomacy and military operations.”

James C. Pearson, in an article related to the role of the National Security Advisor, in *Essays on Strategy, XIII*,<sup>10</sup> says, the National Security Advisor must spearhead national resources integration:

“Today,” he says, “the line between domestic and international affairs is gone. However, the requirements to match finite resources to seemingly infinite priorities remains valid. The National Security Act established a National Security Resources Board to plan for coordination of programs for the effective use of the nation's industrial and natural resources in meeting the needs of the military and civilians during war. The point we must realize is that the President needs advice on alternative military and economic programs in peacetime as well as war. The National Security Advisor must develop the structure required to integrate foreign and domestic policy in a way that best provides for our National Security needs.”

So National Security as an idea, from the very beginning, was the integration of elements of the Defense system with other systems in the government to “optimize the system” on behalf of the nation.

Infrastructure Security is an Element of National Security

National Security is infrastructure strength. The economy, a strong military capability, the health of the industrial base, stable government and diplomacy, education, global industries, political stability, strong societal and moral codes, the rule of law, health-care, environmental sustainability. All of these issues are elements of National Security.

I have only begun to define the work that could be done in understanding the complex systems nature of National Security. World peace may depend upon our ability to understand and articulate these issues and explore their many ramifications for a national, and then, global, dialogue.

Sources:

1. Russell L. Ackoff, *The Democratic Corporation*, Oxford University Press, New York, 1994.
2. Alvin Toffler, *The Third Wave*, Bantam Books, New York, 1980
3. L. Erik Kjonnerod, Editor, *Evolving U.S. Strategy for Latin America and the Caribbean*, Lieutenant General H.J. Hatch, "Security, Stability, Sustainability: Conditions for Peace," National Defense University Press, Washington, DC, 1992.
4. W. Edwards Deming, *The New Economics*, MIT Press, Cambridge, MA, 1993.
5. L. Erik Kjonnerod, Editor, *Evolving U.S. Strategy for Latin America and the Caribbean*, Abraham F. Lowenthal and Peter Hakim, "The Challenges Ahead," National Defense University Press, Washington, DC, 1992.
6. Lester Thurow, *Head to Head*, William Morrow and Company, New York, 1992.
7. Martin and Susan J. Tolchin, *Selling Our Security*, Alfred A. Knopf, New York, 1992.
8. Paul Hawken, *The Ecology of Commerce*, Harper Business, New York, 1993.
9. Thomas P. Coakley, Editor, *C<sup>3</sup>I: Issues of Command and Control*, Rodney B. McDaniel, "C<sup>3</sup>I: A National Security Council Perspective," National Defense University Press, Washington, DC, 1991.
10. Mary A. Sommerville, Editor, *Essays on Strategy XIII*, James C. Pearson, "Midcourse Corrections for the National Security Advisor," National Defense University Press, Washington, DC, 1996.