

# 16

---

## Strategy as a Profession for Future Generations

Andrew W. Marshall

### *A Visit to Chartres and Jouy*

One of Albert Wohlstetter's distinctive characteristics has always been his search for the absolute best of whatever is available. This has been true of everything: people, technical advice, furniture, medical care, and, perhaps most importantly, food. In the mid-1950s, travel to Europe increased for many people at RAND. In the fall of 1956 my wife and I were in Paris at the same time as the Wohlstetters—Albert, Roberta, and Joanie. Harvey DeWeerd was also there. Early one Sunday morning the six of us went off to see the cathedral at Chartres in a car Albert had rented. Albert had also noticed there was a one-star restaurant nearby, in the small town of Jouy. He telephoned to reserve a table.

It was unusually cold for November and, of course, the church was unheated. His enthusiasm and tutelage were unbounded while we muttered quietly and froze. Not a tympanum, portal, window, or carving went unnoted, inside or out. Finally we drove off to Jouy—ravenous and shivering. It was the first occasion for my wife and me to experience the wonderful French custom of a splendid Sunday midday meal. Our expectations were high—and were realized! A charming rustic inn, with gleaming copper pans hanging in an open kitchen. The ebullient patron and his wife all smiles and welcoming *bon jours*, a beaming presence in a room full of warmth and appetizing odors.

I cannot remember the entire meal, but its main features were two roast pheasants with appropriate garnishment and an excellent raspberry soufflé. Both the cathedral and the meal were memorable and excellent. We owe that to Albert and his effort to make the most of every occasion.

\* \* \*

How does one become a strategic thinker? What sort of training

or apprenticeship is useful? What is a strategist? These are all difficult questions. For one thing there are problems of defining *strategic thinking*, or what strategy is. These definitional problems seem to be intractable, and to some extent it may be a matter of recognizing strategic thinking when one sees it. But, in general, strategy as contrasted to tactics deals with the coordination of activities at the higher levels of organizations. Strategy also focuses on longer-term goals and reflects a cast of mind that focuses on shaping the future rather than simply reacting to it.

Our vocabulary and use of words in these areas are seldom precise or accurate. The word *strategy* tends to be used in many ways. In particular I would note that in the national security area, which is the main focus of this piece, there is a constant tendency to think of military strategy as related principally to the application of resources in a possible future war and the general guidance for more detailed planning for specific contingencies. The result is that there is relatively little discussion of strategies for the peacetime management of our military organizations and for the allocation of resources over time so as to develop more efficient, effective, competitive military forces with appropriate doctrines and concepts of operations. Given the existence of nuclear weapons, the highest priority objective for the United States has been deterrence of large-scale war. In this we have been largely successful. Therefore, the strategic management problem in our national security establishment has been the peacetime competition to preserve and indeed enhance in the future our ability to deter the Soviet Union from actions adverse to our interests. Now even this definition of our priority objective may need serious amendment as we move into a more truly multipolar world.

It is clear that some people seem more readily able to address issues of strategy or the strategic management of our national security efforts. They have a willingness and a self-confidence to address larger, more basic issues than do others. They often appear to bring a very different perspective to the discussion of the issues of what our strategy ought to be. How do they get this way? What sort of training is useful? This is what I want to address in the next two sections.

### **What Environments Produce Strategists?**

This is a question that deserves extensive study. All I can do is draw upon my experience in and observations of the environment at the RAND Corporation in the 1950s and early 1960s and my later experience in government in the period 1972 to the present. One disadvantage of focusing on RAND as a producer of strategists is that it clearly biases the discussion toward an analysis of the development

of people whose role has been advisers in the sense that Herb Goldhamer treated in his book, *The Adviser*.<sup>1</sup> There are other routes to being a strategist, including those who reach high positions in the military services or enter government service from other career lines such as the law or investment banking. But the case of RAND is perhaps of special interest because it did provide in the 1950s and early 1960s an environment that produced a number of people who are now acknowledged as major strategic thinkers.

### *The RAND Experience*

There was something special about the RAND environment from the late 1940s through most of the 1960s. For one thing, especially in the late 1940s and the 1950s, there was a sense of being on the leading edge, of dealing with the centrally important problems. The invention of nuclear weapons and several other technology developments at the end of World War II produced a situation that was quite new, one in which the issue of what our strategy should be was extremely important. Another aspect of this situation, given the large increase in destructive power nuclear weapons introduced, was that there were no experts. Two small weapons had been used at the very end of World War II; what larger numbers of weapons might do to change the nature of war was unclear. Nobel prize winners were no better than graduate students in thinking about the relevant issues, and at meetings and working groups at RAND in the early days there was no hierarchy. This was an ideal situation for younger people (the average age of the professional staff at RAND in 1950 was about twenty-eight), who were immediately treated as equals and valued for what they could contribute to the discussions. This is a rare situation, certainly not characteristic of academia or normal organizations, and it led to the rapid development of individuals who were willing to address the broadest issues of national security. There was also a sense of having a preferred position with respect to access to information on the new developments taking place in weaponry, in particular in the design of nuclear weapons, their delivery systems, and other relevant technology.

Two other things favored the development of strategic thinking and innovation at RAND. One was the freedom RAND had to select the problems and the issues on which it worked. This is very different from the environment in contract studies organizations, especially now. The other was the presence of several remarkable men who set the intellectual tone and style of much of the broader analysis that began in the early 1950s. Two I would name are Charles Hitch and John Williams, the heads respectively of the Economics and the Mathematics

Divisions. Apart from their own intellectual contributions, their interest in the cultivation of full-ranging discussion, their intellectual fairness, and their interest in the development of younger people and of new methods of analysis all favored innovation.

One of the interesting things that happened at RAND was the success of the economists in assuming a leading role in the direction of a number of important studies and, more generally, in shaping the way in which RAND addressed national security issues. Initially the economists were brought into what had been largely a technological organization to deal with what was called the military worth function. It had become clear to the technical people that they needed some assistance in thinking about the objectives that military weapon systems were to achieve. There was also some interest in the economics of defense, especially as it dealt with issues of mobilization, and in the targeting of an opponent's industrial capacity and assessing damage to industrial societies from strategic bombing. The economists soon played a much larger and more central role in managing and directing a number of the successful studies. Why was this?

Herman Kahn and I used to discuss this puzzle. We had a number of hypotheses. For one thing the economics of the situation, broadly conceived, were important. What things cost, the level of resources that nations are able to devote to defense over an extended period—these all shape one's views as to the kinds of weapon systems that are desirable and feasible. But another advantage the economists had was that they knew from their own experience that experts could be wrong. Indeed, they also knew that much discussion of economic problems is foolish and that many widely held views, even among responsible people, are faulty. The experience of engineers and physicists is different. In those fields there are real experts who are much more likely to be right than are others. Economists, therefore, were more intellectually comfortable in the situation that existed with respect to nuclear warfare, in which there were no experts.

One of the people in the economics department who was the first to lead and manage a large RAND study was Albert Wohlstetter. Beginning in the early 1950s, he examined a set of issues connected with the basing of long-range bombers. The results of that study are discussed elsewhere in this book. I want to note what seems to me one of the major innovations or inventions Albert made in the conduct of that study. In previous large RAND studies, the practice had been to lay out a number of alternative systems or programs at the very beginning of the study. The study itself focused on evaluating which of the alternative systems was the most cost-effective.

Albert's approach was different. He started with a few alternatives to the existing plan or program, but as the study went on he evolved improved alternatives. He was also less rigid than had been the practice in setting down the criteria, the objective functions, the measures of effectiveness at the beginning of the study and simply sticking with them. His evolutionary approach developed additional criteria and tests of performance as more understanding of the problems and the issues emerged. This was, in my judgment, a crucial invention for doing these kinds of studies, because one would learn much more about the nature of the issues and the problems, how one ought to look at them, and what criteria were relevant as one went further along in the studies. Also, this way of conducting the analysis had the advantage of inventing additional and better alternatives to examine as one went along.

Another aspect of the situation at RAND that was exceptionally favorable to strategic thinking and innovation during the early period was the practice of inviting first-rate people to come and spend the summer. This created an environment in which the important thing was to try to tap into the very best talent in the whole country. The objective was not to do the best that RAND could do with its existing staff, but in a sense to do an analysis that was the best that the country as a whole could accomplish. By its very nature, any organization is limited in the amount and variety of talent, backgrounds, and insights that it can include among its staff. This attitude of searching for the very best people and drawing on the best talent is a key to excellence in broad thinking about any problem or issue. Unfortunately, most organizations do not operate this way.

There is perhaps a natural history to most organizations. When they are first formed they are focused on a mission, they recruit people who are enthusiastic and who devote themselves to the goals of the organization. As time goes on the organization becomes less flexible, accumulates some deadwood, and has some difficulty in sustaining the original vitality. Organizations sometimes are formed in especially suitable environments that allow them to flourish for a time. Then the external environment changes and the organization declines in vitality. In any case, the RAND of the 1950s and early 1960s was a remarkable place, both for the talent it recruited and for its atmosphere and intellectual dynamic. It was also remarkable for its boldness in addressing broader questions of strategy. It is, therefore, not surprising that some interesting and influential people developed there.

### ***The U.S. Government***

The next experience that is perhaps relevant comes from my time in government. Beginning in the middle 1970s, I was involved in

attempts to initiate strategic planning activities in the Department of Defense and in the direction of some strategic planning experiments. In particular, James Roche, then a navy commander, and I wrote several papers during 1975-1976 to promote strategic thinking in the Defense Department. We also sponsored contractor research on some aspects of strategic planning. This experience led me to believe that, while systems analysis had been a liberating force during its early development, by the middle 1970s it had become a constraint on thinking strategically. People who were systems analysts found it difficult to address the sorts of questions that we felt needed to be considered in strategic planning. People with a business background or a combination of business school and military service seemed to be among the best at taking up and addressing the questions we wanted dealt with.

We saw it as a vaccination problem: some backgrounds promoted strategic thinking and others seemed to inoculate people against it. Why is that? To some extent, the systems analysts had by that time developed routine approaches to analysis and perhaps had ceased paying sufficient attention to the complex consequences of acquiring the systems they dealt with. James Schlesinger made a comment to me a number of years ago that systems analysis proceeds by trivializing the measurement of effectiveness while perfecting the analysis and the estimate of costs. Programmatic actions, the acquisition of particular weapon systems, the adoption of a new concept of operations, or the setting of new objectives for military forces have complex consequences, including their effects upon the beliefs, actions, and resource allocation patterns of the potential opponents. Most of these consequences are not usually considered in the standard kinds of analysis. One result is that the top leadership of the Department of Defense often gets remarkably little assistance from their staffs when truly strategic decisions are addressed. This is because the focus of the work of the staffs, the criteria they use, and their measures of effectiveness are too narrow to account for the considerations that top-level decision makers in fact want to consider, are concerned with, and take into account as best they can.

Some decisions have larger and different consequences than others. For example, a decision to pursue or create a major strategic defense capability is different from a decision among several alternative programs for the next generation of fighter aircraft. The former involves going into a new business for the U.S. military (although it is a business we once were in), the latter the continuation of an existing business. Different issues are involved, different forms of analysis seem needed, but existing analysis methods tend to treat the two types of decisions

the same way. Part of the problem may be that much if not all of the existing analysis methodology was developed to assist in procurement or operational-planning decisions. Other methods of analysis are necessary when the questions are more like: What businesses should I be in? Where are my competitive advantages? One advantage people from the business world or business schools may have is that they are used to addressing these kinds of questions, though often with analysis methods that are less systematic.

### **What Backgrounds and Experiences Are Conducive to Strategic Thinking?**

There is no specific set of disciplines that must be mastered to be a strategist. People who think strategically come from a number of different backgrounds. Among those whom I have met and feel that I know personally the best academic backgrounds seem to be economics, business school, applied technology (especially for those who have been in the business world), and in some cases political science. But what seems to be central is a cast of mind that is questioning, eclectic, able to devise the broadest kinds of issues and goals, and able to formulate appropriate ways of achieving these goals. A high tolerance for the uncertainty that necessarily accompanies any effort to think forward five, ten, or twenty years is required. For many people, some period of intense involvement in an important, large-scale project or enterprise has proved to be crucial.

World War II was such an experience for a number of people and, indeed, there may be a generational factor at work: living in interesting times may contribute to being a good strategist. People who were involved—even if only in staff positions or on the peripheries—in some major decision-making body connected with that war had a special quality about them. Experiences in World War II clearly had a significant impact on a number of the people who were at RAND during the 1950s. Because they contained many people with World War II experience the Truman and Eisenhower administrations had a character to them that favored strategic thinking. This characteristic of administrations has gradually eroded since the late 1950s.

The changes that we now see in the security environment of the United States will force another major effort of rethinking our situation, our goals, and our strategies. It might, therefore, be a period in which a new generation of strategic thinkers will emerge as a result of the critical experiences they will go through in the next decade.

Turning to the question of what kind of academic study or professional training might be useful, I would start with economics and business

school training, especially business schools that have strong programs in business policy and strategy. My recommendation about economics is, however, a guarded one. Since the 1940s and 1950s, economics training has become too mathematical, too focused on the acquisition of particular analytic tools that are not, in fact, of much use in the national security area. Something like the first courses in graduate school may be enough. They are important, however, because people who do not have a sense of macroeconomics and the fundamental trade-offs that societies have to make find it difficult to think clearly about the long-term implications of devoting large, possibly excessive, percentages of gross national products (GNPs) to military uses. The current state of the Soviet Union is in some part the result of decades of a heavy military burden, with perhaps on the order of 25 to 30 percent of GNP devoted to the military and the external empire.

In the early 1980s, when the first initiatives were taken within the Defense Department to encourage application of a set of ideas that later were labeled as competitive strategies, I had a discussion with the chief of one of the military services. His reaction to the idea of designing some military programs so as to impose increased costs upon the Soviets was negative, or at least cautious. He had two arguments against focusing on increasing Soviet costs or expenditures. The first was that the Soviets would simply spend the extra money, there were no reasons for them not to do so; the second was that our own budgets fluctuate so much that it was unwise to stimulate a competition which we ourselves might not sustain. The second of these arguments has real merit to it. The first shows an unawareness of the long-term consequences for the Soviets of high levels of military expenditures or of possible trade-offs between individual programs the Soviets might be compelled to make, since resources always are limited.

Another virtue of economics training, or for that matter business-school training, is that a modest amount of mathematics is acquired, as is some sense of the importance of technology and an ability to interact more effectively with technologists and hard scientists. This was one of the advantages the economists had over the political scientists at RAND in the early 1950s: quantitative analysis was something the economists were used to and their interest in or ability to discuss and understand what the technologists were up to was somewhat better than that of the political scientists.

Demography is another area that deserves much more attention than it has had in the past in the development of strategy. The relationship of demography to political and military behavior is likely to be an area of increased importance and attention. Demography is often brought into discussions of strategy and broad national policy,

but in only the most obvious and limited ways. William McNeill recently wrote a small volume addressing some of the broader relationships of demography to political behavior.<sup>2</sup> As in other of his works, he provides a number of hypotheses and sketches out areas that deserve considerably more attention.

Additional fields of interest are cultural anthropology, ethology, and some areas of psychology. In some ways a new understanding of man is emerging, based on study of the evolution of man and human society and on new analyses of the biology of man, in particular the functioning of the brain. How men process information, make decisions, and behave are central issues on which much new knowledge exists and more will be available in the future.

But above all, if I had a suggestion to make, it would be that people study, in any case at least read, history of all kinds: military history, of course, but also economic and technological history. The history or analysis of past wars is a major antidote to the narrow focus of many existing methods of analysis of defense issues. Most discussion of strategy and defense programs is, if anything, too focused on technology and weaponry and not enough on the other factors that often dominate actual warfare. Also, if one considers the extended competition between states such as Rome and Carthage, the issue of why the Romans won in the end may shed interesting light on the key variables that need to be considered in our conceptions of strategy.

Another thing that is of great importance is to understand the differences in the ways in which other nations are likely to perceive situations and react to them. Specialized studies of the strategic cultures of the Soviet Union, China, India, Japan, and the European nations are of great use. Some of this can be gained by reading the history of these nations, especially the development of their military and other national security organizations. Other aspects relate to the particular cultural characteristics of these societies.

### **The Future of Strategy**

We are at a major turning point in the history of the world. A new structure is emerging, a more multipolar world with more complex alliance arrangements. Technology is likely to change the nature of warfare, much as it did in the period of the 1920s and 1930s. Then the development of naval aircraft and aircraft carriers revolutionized war at sea; on land the development of the tank and rugged, portable radios led to the invention of the panzer division and new concepts of operations that changed the nature of theater warfare; and, of course, there was the development of tactical and strategic air forces.

New weapons required the development of new doctrines, new concepts of operations, and new kinds of military organizations to exploit fully the new technology. How we are to maintain the U.S. military and national security position over the course of the next twenty years is a central issue that will have to be addressed. What our strategy should be for the more complex competition that is emerging will require consideration of many aspects of the changing security environment and changing technology. We will need to know much more than we now do about the emerging regional powers, as well as about the likely major actors, their strategic orientation, their strengths, and their weaknesses.

It is to be hoped that new centers of strategic thought and innovation will arise and a new generation of strategists and military innovators will develop to deal with these problems.

#### Notes

1. Herbert Goldhamer, *The Advisers* (New York: Elsevier, 1978).
2. William H. McNeill, *Population and Politics Since 1750* (Charlottesville, Va.: University Press of Virginia, 1990).